

**IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

NEW YORK IMMIGRATION
COALITION, *et al.*,

Plaintiffs,

v.

UNITED STATES DEPARTMENT OF
COMMERCE; and WILBUR L. ROSS,
JR., in his official capacity as Secretary
of Commerce, *et al.*

Defendants.

Civil Action No. 1:18-cv-05025

RULE 26(A)(2)(B)
EXPERT REPORT AND
DECLARATION OF D. Sunshine
Hillygus, PhD

I. Background and Qualifications

I am Professor of Political Science and Public Policy at Duke University, where I teach undergraduate and graduate level courses on the topics of public opinion, political behavior, political communication, and survey methodology. I earned a Ph.D. in political science from Stanford University in 2003. From 2003-2009, I was a faculty member at Harvard University in the Department of Government. In 2009, I joined the faculty at Duke University as an associate professor and was promoted to full professor in 2015. A copy of my curriculum vitae is attached. I am being compensated at a rate of \$375 per hour.

Relevant to the subject of this report, I am co-author of *The Hard Count: The political and social challenges of census mobilization* (2006, Russell Sage Foundation). From 2012-2018, I served as a member of the Census Scientific Advisory Committee (CSAC), a committee that advises the U.S. Census Bureau (Bureau) on the uses of scientific developments in statistical data collection, survey methodology, geospatial and statistical analysis, econometrics, cognitive psychology, business operations, and computer science as they pertain to the full range of Census Bureau programs and activities, including census tests, policies, and operations.¹ I have also published many academic articles in respected scientific journals, including *Public Opinion Quarterly*, *Journal of Survey Statistics and Methodology*, *Statistical Science*, *Political Analysis*, and *Annals of Applied Statistics*, among others. My survey and methodological research has been funded by the National Science Foundation. I serve on the Board of the American National Election Study and on the editorial boards of several academic journals. I am currently director of the Initiative on Survey Methodology at Duke University and was founding director of the Program on Survey Research at Harvard University.

I previously served as an expert witness in *League of Women Voters of North Carolina, et al. v. North Carolina, et al.*, Civil Action No. 1:13-CV-00660-TDS-JEP (M.D.N.C.).

II. Summary of Opinions

I have been retained to evaluate the decision to add a citizenship question to the 2020 decennial census. In particular, I was asked to assess various assertions in a March 26, 2018 memorandum signed by U.S. Commerce Secretary Wilbur Ross regarding: (i) existing evidence concerning the effect of adding a citizenship question to the 2020 census on response rates to the census and the undercounting of subpopulations such as Hispanics and noncitizens; and (ii) the adequacy of testing the 2020 census questionnaire featuring the proposed citizenship question.

¹ For more information about CSAC, see <https://www.census.gov/about/cac/sac.html>. CSAC advises the Census Director on the full range of Bureau programs and activities including communications, decennial, demographic, economic, field operations, geographic, information technology, and statistics. The committee consists of a chair and twenty additional members, representing academia, private enterprise, professional associations, and nonprofit organizations.

To formulate an expert opinion in this case, I reviewed a variety of materials from academic, governmental, legal, and media sources. These materials included U.S. Census Bureau reports and analyses and scientific research on survey methodology. I also relied on my own experiences and familiarity with survey practices and standards and Census Bureau programs and activities.

To summarize:

1. Notwithstanding Secretary Ross’s assertion that there is no “definitive, empirical support”² for the belief that adding a citizenship question could reduce response rates, I find compelling evidence that inclusion of a citizenship question will depress participation in the decennial census, exacerbate the differential undercount of noncitizen and Hispanic households, lower response quality, and create negative attitudes about the Bureau. This evidence includes scientific research examining survey participation and respondent burden with respect to sensitive survey questions generally; evidence concerning attitudes and survey behavior of Hispanic and non-citizens respondents specifically; and, perhaps most critically, internal Census Bureau analyses concerning survey response patterns among Hispanics as compared to non-Hispanic Whites (“Whites”), and among noncitizens as compared to citizens.
2. Given the sensitivity of the citizenship question, survey methodology best practices and U.S. Census Bureau guidelines and processes would dictate thorough testing and evaluation of a decision to add the citizenship question to the 2020 census questionnaire *before* implementation, to ensure that the change will not reduce response rates, exacerbate differential undercounts, or impact data quality in other ways.³ That did not occur here. Secretary Ross’s assertion that the citizenship question has been “well tested”⁴ through its use on a different Census Bureau survey—the American Community Survey (or “ACS”)—is incorrect, as it ignores critical differences between the ACS and decennial census questionnaires, including the comparative context and sequencing of questions on the two instruments. For reasons I discuss below, these differences limit the relevance and validity of prior testing of the citizenship question on the ACS for understanding how its inclusion on decennial census questionnaire could affect differential undercounts, response rates, and other indicators of data quality.

² 18-CV-2921 ECF 189-1, Memorandum from W. Ross on Reinstatement of a Citizenship Question on the 2020 Decennial Census (“Ross Memo”) (March 26, 2018), at AR-001316.

³ According to U.S. Census Bureau information quality standards, data quality includes the objectivity, utility, and integrity of the information. Common empirical markers of data quality are *unit response rates*—that is, the percentage who take the survey; *item nonresponse*—the percentage who skip a specific question; *break-offs*—the percentage who leave the survey before completing it; *response accuracy*—the percentage responding truthfully. Unacceptably low response rates and measures of reliability or validity are indicators of poor data quality. See [U.S. Census Bureau Statistical Quality Standards, \(July 2013\), www.census.gov/content/dam/Census/about/about-the-bureau/policies_and_notices/quality/statistical-quality-standards/Quality_Standards.pdf](https://www.census.gov/content/dam/Census/about/about-the-bureau/policies_and_notices/quality/statistical-quality-standards/Quality_Standards.pdf), pp. i-ii.

⁴ Ross Memo (March 26, 2018), at AR-001314.

3. Additionally, I conclude that the decline in nonresponse rates caused by the addition of the citizenship question is not likely to be fully addressed through increased outreach or nonresponse follow-up (“NRFU”) efforts. Although the Census Bureau has procedures for enumerating households that do not initially self-respond to the decennial census questionnaire, there is no empirical evidence to suggest that such efforts will be adequate to prevent decreased response rates among Hispanics and noncitizens from translating into an increased undercount of these subgroups. In fact, there is compelling evidence that NRFU will be less successful in addressing census non-response among these subpopulations.

4. Beyond jeopardizing the accuracy and completeness of the decennial count, the addition of a citizenship question threatens to undermine the utility and integrity of the census data, in violation of government-wide information quality guidelines.⁵

III. Background on the U.S. Census

The Use of Census Data: The U.S. Constitution requires a count of every person living in the United States every 10 years for the purpose of reapportioning seats in the U.S. House of Representatives. While the most fundamental use of the decennial census is to determine the number of seats a state gets in Congress and to redraw congressional districts and all other political boundaries within a state, the total population count has many other uses. Census numbers are used to allocate billions of dollars in federal program funds to states, counties, and cities. The census is the primary source of statistical data about the U.S. population, providing detailed information necessary for the functioning of government, communities, and industry. Communities use census data to make decisions about where to build roads, schools, and hospitals. Businesses use census data to decide where to invest resources. Social scientists use census data to conduct scientific research about society, economics, and politics. Census numbers provide the benchmark against which every other data collection about the population is evaluated and adjusted and sets the sample frame for surveys throughout the federal statistical system. Thus, political and economic stakes are high for this once-per-decade population count.

The Undercount: Although the U.S. Census Bureau has the goal to “count everyone once, only once, and in the right place,”⁶ scientific measurements of census accuracy since 1940 have shown a persistent and disproportionate undercount of some population subgroups, including racial and ethnic minorities, renters, young children, and immigrants. The Bureau calls these subgroups hard-to-count (“HTC”) populations and has invested considerable research and resources into improving their enumeration.⁷ HTC populations are more likely to be missed by

⁵ U.S. Census Bureau, *Information Quality Guidelines*.

<https://www.census.gov/about/policies/quality/guidelines.html>.

⁶ <https://www.census.gov/programs-surveys/decennial-census/about/why.html>.

⁷ For example, a recent GAO report notes that 14 of 35 of the operations for the 2020 decennial count were designed, in part, to improve enumeration of HTC populations. U.S. Government Accountability

the decennial count (and other government surveys) because they are hard-to-locate, hard-to-contact, hard-to-interview, or hard-to-persuade.⁸ Although researchers have extensively documented and researched the differential undercount—and developed statistical corrections—adjusted numbers are not currently used for apportioning Congress.⁹ It is thus critical to carefully consider potential threats to the accuracy and fairness of the decennial count and conduct extensive testing and evaluation to mitigate risks at each stage of the data collection process.

At the same time that the decennial count undercounts some segments of the population, the decennial has also overcounted Whites in the 2000 and 2010 censuses, largely as a result of double counting those with second homes or those with college students away from home.¹⁰ The *differential undercount* refers to the difference between the undercount rate of a minority group and that of Whites. The *net undercount* refers to the difference between the gross undercount (the number of people who should have been counted in the Census but were not) and the gross overcount (the number of people who should not have been counted, either because they were counted more than once or should not have been counted at all). An independent post-enumeration survey found that the 2010 decennial count had a net overcount of only 0.01 percentage points, but an undercount of 1.54 percentage points of Hispanics (nearly 500,000 individuals) and an over-count of Whites of 0.83 percentage points, resulting in a differential undercount of Hispanics of 2.37 percentage points.¹¹

Impact of Undercount on Apportionment, Redistricting, and Funding: This differential undercount has implications for political power and funding because of the geographic distributions of these HTC subgroups. The undercounted segments of the population are concentrated in a few states—Texas, Florida, Arizona, and New York—and even within particular counties in those states.¹² More than half of New York’s 3.6 million Hispanic residents

Office (July 2018) “Actions Needed to Address Challenge to Enumerating Hard-to-Count Groups, GAO-18-599, p. 19. <https://www.gao.gov/assets/700/693450.pdf>.

⁸ Roger Tourangeau, Brad Edwards, Timothy Johnson, Kirk Wolter, and Nancy Bates (2014), *Hard to Survey Populations*. Cambridge: Cambridge University Press.

⁹ *Department of Commerce v. U.S. House of Representatives*, 525 U.S. 316 (1999).

¹⁰ Coverage in the decennial census is measured by comparing the census counts to independent estimates of the population developed through demographic analysis or a post-enumeration survey. Reasons that Non-Hispanic Whites may be overcounted include that they are more likely to have multiple residences (e.g., ownership of more than one home, university students counted at academic and parents’ residences, etc.).

¹¹ The undercount of Hispanic children is even more severe. Demographic analyses estimated 7.5% of Hispanic children under the age of 5 were undercounted in the 2010 Census. O’Hare, W.P. (2014). “Assessing Net Coverage Error for Young Children in the 2010 U.S. Decennial Census.” Center for Survey Measurement Study Series (Survey Methodology #2014-02). U.S. Census Bureau, <http://www.census.gov/srd/papers/pdf/ssm2014-02.pdf>.

¹² See <https://www.censushardtcountmaps2020.us/>.

live in “hard-to-count” census tracts, highlighting the potential impact of an exacerbated undercount of this population.¹³

Even before the addition of the citizenship question, the Bureau faced many challenges to achieving a fair and accurate decennial census.¹⁴ Response rates for all surveys and censuses, including Census Bureau surveys, have declined in recent years. Although the decennial census is different from a typical survey in that it is mandatory, it is not immune from the general decline in response rates afflicting surveys and censuses around the world.¹⁵ Completion of the decennial census and the American Community Survey (ACS) are required by law, but the Bureau is a statistical agency, not an enforcement agency, and has publicly confirmed that nobody had been fined for failing to participate.¹⁶ Thus, despite being mandatory, response rate is a foremost concern given its implications for the cost, quality, and fairness of the count. In particular, the self-response rate is often the primary quantity of interest and study because the data collected by self-response are more accurate and less expensive than that collected through the Non-Response Follow-up (NRFU).¹⁷

IV. The Effect of Adding a Citizenship Question on Response Rates to the 2020 Decennial Census

In assessing whether the inclusion of a citizenship question will exacerbate the differential undercount and the quality of the data collected through the decennial Census, the first issue to consider is whether the inclusion of the question will affect participation rates in the census. In his decision memo, Secretary Ross asserted that “[t]he reinstatement of a citizenship question will not decrease the response rate of residents who already decided not to respond.”¹⁸ This contravenes scientific understanding of the survey participation decision. Survey methodology research shows that it is too simplistic to think about an individual as either an inherent responder or an inherent non-responder; the decision to participate is influenced by factors beyond an individual’s personal characteristics, including the survey

¹³ See <http://civilrightsdocs.info/pdf/census/2020/Table1a-States-Number-Hispanics-HTC.pdf>.

¹⁴ The 2020 Census Operation Plan acknowledges that threats to the decennial count from declining response rates, distrust in government, a more diverse and mobile population, informal and complex living arrangements, and technological and information changes. U.S. Census Bureau (2017), *2020 Census Operation Plan: A New Design for the 21st Census*. V.3. <https://www2.census.gov/programs-surveys/decennial/2020/program-management/planning-docs/2020-oper-plan3.pdf>.

¹⁵ J. Czajka and A. Beyler (2016), *Declining Response Rates in Federal Surveys: Trends and Implications* Washington, DC: Mathematica Policy Research.

¹⁶ W. Gardner Selby (2014), “Americans must answer U.S. Census Bureau survey by law, though agency hasn’t prosecuted since 1970,” *Politifact.com* <https://www.politifact.com/texas/statements/2014/jan/09/us-census-bureau/americans-must-answer-us-census-bureau-survey-law/>.

¹⁷ R. Jarmin Dep., dated Aug. 20, 2018 at 308: 15-17; J. David Brown, et al., “Understanding Quality of Alternative Citizenship Data Sources for the 2020 Census,” Center for Economic Studies, U.S. Census Bureau Working Paper 18-38. (Aug. 6, 2018), at COM_DIS00009873.

¹⁸ Ross Memo (March 26, 2018), at AR-001317.

design features, the sociopolitical climate, and the actions of the field staff.¹⁹ This scientific understanding of survey participation is apparent throughout the Bureau's standards, practices, and research products.²⁰

The likely impact of a citizenship question can be evaluated from this conceptual framework of the survey participation decision. A large body of scientific literature on survey methodology—including hundreds of books and articles in scientific journals—has examined the impact of various design and implementation decisions on survey participation and data quality. These studies often use randomized control trials to compare different ways the survey design can deter or promote participation. Design features include a wide range of characteristics including: mode of survey, question wording, question order, survey sponsor, financial incentives.²¹

These survey design features—along with the perceived response burden and the sociopolitical climate—help to determine whether or not an individual will respond to a survey.²² Of particular relevance to the assessing the impact of an addition of a citizenship question, concerns about confidentiality are an indicator of response burden and can depress survey participation and reduce data quality. Moreover, confidentiality concerns vary in the population, related to the risk of harm from disclosure.²³

For the 2020 decennial census, this scientific framework for thinking about survey participation would thus predict that the subgroups in the population disproportionately concerned about the confidentiality of the citizenship question will be less like to respond, more likely to skip the individual question, and more likely to give an inaccurate response. (As discussed in Section IV.B, the Census Bureau's research confirms that non-citizens and Hispanics are less likely to respond to the survey if it includes a citizenship question, more likely to skip a citizenship question, and more likely to give an inaccurate response to a citizenship question.)

Secretary Ross claims that there is no "definitive, empirical support" for the belief that adding a citizenship question could reduce response rates, but a review of the scientific literature examining survey participation—together with internal Census Bureau analyses—offer

¹⁹ See, for instance, Robert Groves, F. Fowler Jr, M Couper, J. Lepkowski, E. Singer, and R. Tourangeau (2009), *Survey Methodology (2nd)*. Hoboken: John Wiley and Sons.

²⁰ As one example, see BK Atrostic, N. Bates, and A. Silberstein (2001), "Nonresponse in US government household surveys: consistent measures, recent trends, and new insights," *Journal of Official Statistics* 17(2), p.209.

²¹ As an example of the type of design decisions that can affect response, research consistently finds that financial incentives can significantly increase survey participation. Incentives are obviously not a relevant factor for the decennial census, but this example highlights the way that the survey design decisions can shape the respondent participation. It also illustrates just one of the reasons it is problematic to draw inferences from the experience of Nielsen (AR-001276).

²² See, for instance, Groves (2009).

²³ Roger Tourangeau and Ting Yan (2007), "Sensitive questions in surveys," *Psychological bulletin* 133, no. 5: 859.

compelling evidence that the addition of the citizenship question will reduce response rates. As explained in a classic Survey Methodology textbook, “There are some ubiquitous correlates of the tendency to refuse a survey request...When the key variables of the survey are related to these attributes, *we can anticipate nonresponse biases in the respondent-based estimates.*”²⁴ Although no predictive estimate can ever be “definitive,” a review of the various factors related to survey participation all consistently point to the same conclusion: the addition of a citizenship question is likely to lower response rates and data quality among non-citizens and Hispanic households.

A. Background on Factors Affecting Survey Participation Rates

Numerous factors affect an individual’s decision to participate in a survey. Below, I discuss factors most relevant to the inclusion of a citizenship question on the decennial census.

i. Respondent Burden

Among the most important factors related to an individual’s decision to participate is the burden of the survey. It is well-recognized in the scientific literature and by the Bureau that increased response burden is associated with lower response rates and diminished data quality.²⁵ Response burden depends on the length, complexity, intrusiveness, and sensitivity of the questions asked. In a classic work on the topic, survey methodologist Norman Bradburn explains that response burden includes not only the time and effort required to take a survey, but also the “amount of stress experienced by the respondent.”²⁶ The Bureau recognizes this broad conception of response burden. For example, in his January 19 memo to Secretary Ross, Dr. John Abowd, Chief Scientist and Associate Director for Research and Methodology of the Census Bureau, explained that “[s]urvey methodologists consider burden to include both the direct time costs of responding and the indirect costs arising from nonresponse due to perceived sensitivity of the topic.”²⁷

Highlighting the importance of response burden to the federal statistical system, the Paperwork Reduction Act (PRA) of 1995 requires federal agencies to certify to the OMB that “efforts have been made to reduce the burden of the collection.”²⁸ The 2010 Census tagline “Just 10 questions” highlighted the ease of completing the decennial questionnaire. Concerns regarding

²⁴ Groves, et al. (2009), pp. 200-201, emphasis added.

²⁵ Groves, et al. (2009).

²⁶ Norman Bradburn (1978), “Respondent burden,” *In Proceedings of the Survey Research Methods Section of the American Statistical Association* (Vol. 35, p. 40). Alexandria, VA: American Statistical Association, p. 36.

²⁷ 18-CV-2921 ECF 189-1, Memorandum from J. Abowd on Technical Review of the Dep. of Justice Request to Add Citizenship Question to the 2020 Census (Jan. 19, 2018), at AR 001281.

²⁸ United States Office of Personnel Management (April 2001), Paperwork Reduction Act (PRA) Guide. V. 2.0, <https://www.opm.gov/about-us/open-government/digital-government-strategy/fitara/paperwork-reduction-act-guide.pdf>.

the response burden of the American Community Survey—the sample survey that replaced the census long-form—have prompted an extensive research program and several changes at the Bureau, including the creation of a respondent advocate position, a reduction in the number of contact attempts in Census surveys, the development of a “Why We Ask” brochure, and a number of questionnaire content changes.

In his memo, Secretary Ross defined response burden exclusively in terms of the time it takes to answer survey questions, writing: “A second concern that stakeholders advanced is that recipients are generally less likely to respond to a survey that contained more questions than one that contained fewer.”²⁹ However, response burden is not simply the amount of time that will be spent on a survey. Secretary Ross’ memo failed to recognize that survey burden also depends on the complexity, intrusiveness, and sensitivity of a questionnaire.

Indeed, Census Bureau research clearly shows that the inclusion of sensitive questions on a questionnaire is related to perceived respondent burden.³⁰ Sensitive questions are those viewed as intrusive, those asking about socially undesirable attitudes or behaviors, and those where there is a perceived consequence for disclosure.³¹ Extensive empirical research shows that sensitive questions can result in increased burden, which can impact data quality in a number of ways, including:³²

- decreasing *unit response rates*—that is, the percentage who take the survey;
- increasing *item nonresponse*—the percentage who skip a specific question;
- increasing *break-offs*—the percentage who leave the survey before completing it;
- decreasing *response accuracy*—the percentage responding truthfully; and
- increasing negative evaluations of surveys generally.

Moreover, the perceived sensitivity of a question varies across respondents, resulting in a differential impact on survey participation.³³

In sum, the burden of a survey is one of the key factors that determines if an individual participates in a survey and it is related to the sensitivity of the questionnaire.

²⁹ Ross Memo (March 26, 2018), at AR-001318.

³⁰ See, for example, National Research Council (2013), *Benefits, Burdens, and Prospects of the American Community Survey: Summary of a Workshop*. D.L. Cork, Rapporteur. Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press. Also S. Fricker, T. Yan, and S. Tsai (2014), “Response burden: What predicts it and who is burdened out,” In *JSM proceedings* pp. 4568-4577.

³¹ Roger Tourangeau, L. Rips, and K. Rasinski (2000), *The psychology of survey response*. Cambridge University Press.

³² Groves et al. (2009).

³³ Roger Tourangeau and Ting Yan. (2007). “Sensitive questions in surveys.” *Psychological bulletin* 133, no. 5: 859.

ii. Privacy and Confidentiality Concerns

Confidentiality concerns are a key component of perceived respondent burden and extensive empirical research shows confidentiality concerns to be related to lower survey response rates and reduced data quality.³⁴

Although privacy and confidentiality concerns are sometimes considered synonymous, they are different concepts with distinct implications for census participation. Privacy concerns refer to the government's right to ask a question. Confidentiality concerns refer to fears about the disclosure of the information. Kenneth Prewitt, former Director of the Census Bureau, says that protecting privacy is akin to don't ask, whereas protecting confidentiality is about don't tell.³⁵ He explains that "[t]he citizen saying 'I won't answer that question because it is none of your business' is sending a different message from... 'I won't answer because I don't trust the government not to use my answers against me.'"³⁶ Concerns about the addition of a citizenship question are primarily an issue of confidentiality.

Previous empirical research demonstrates that confidentiality concerns affect participation in surveys of all types, including the decennial census.³⁷ For example, one study found that 73.5 percent of those with low confidence in the confidentiality of the U.S. Census Bureau reported mailing back their 1990 census form, compared with 86.1 percent of those with high confidence.³⁸ Using measures of actual census form returns, rather than self-reports, another study found that confidentiality concerns predicted lower 1990 census participation, even after accounting for privacy attitudes and other factors related to participation.³⁹ A similar conclusion was reached in the analysis of the actual returns to the 2000 census—people with higher levels of concern about the confidentiality of the census data were significantly less likely to return their census forms.⁴⁰

³⁴ For example, Eleanor Singer, Nancy Mathiowetz, and Mick Couper (1993), The impact of privacy and confidentiality concerns on survey participation the case of the 1990 US Census. *Public Opinion Quarterly*, 57(4), pp.465-482.

³⁵ Kenneth Prewitt (2011), "Why It Matters to Distinguish between Privacy and Confidentiality," *Journal of Privacy and Confidentiality*, 3(2).

³⁶ Prewitt (2011), pp. 42.

³⁷ For review, see T.S. Mayer (2002), "Privacy and confidentiality research and the us census bureau recommendations based on a review of the literature," *Research Report Series*, U.S. Census Bureau, Feb. 7.

³⁸ RE Fay, N Bates, and J. Moore (1991), "Lower mail response in the 1990 census: A preliminary interpretation," *In Proceedings of the Annual Research Conference*. Washington DC: Census Bureau, pp. 3-32.

³⁹ Singer, Mathiowetz, and Couper (1993).

⁴⁰ Eleanor Singer, J. Van Hoewyk, and R. Neugebauer (2003), "Attitudes and behavior: The impact of privacy and confidentiality concerns on participation in the 2000 census," *Public Opinion Quarterly*, 67(3), pp.368-384.

The Bureau acknowledges the relevance of confidentiality concerns to the quality of the census. The 2020 Operational Plan states: “The accuracy and usefulness of the data collected for the 2020 Census are dependent upon the ability to obtain information from the public, which is influenced partly by the public’s perception of how well their privacy and confidentiality concerns are being addressed...If a substantial segment of the public is not convinced that the Census Bureau can safeguard their response data against data breaches and unauthorized use, then response rates may be lower than projected, leading to an increase in cases for follow-up and cost increases.”⁴¹

To monitor confidentiality concerns, the Bureau has been conducting Census Barriers, Attitudes, and Motivators Studies (CBAMS).⁴² As of the date of this report, the 2018 CBAMS results—following the announcement of the addition of a citizenship question—have been completed, but not have not yet been publicly released.

Thus, the Census Bureau recognizes that confidentiality concerns are related to survey burden and represent a threat to survey participation and data quality.

B. Evidence that the Citizenship Question Will Depress Census Participation among Hispanics and Noncitizens

In his memo, Secretary Ross claims that a citizenship question “is no additional imposition” on citizens.⁴³ That assertion contravenes scientific understanding of response burden and question sensitivity. Citizenship status is undisputedly a sensitive question that increases survey burden—and, as explained below, there is substantial evidence that the addition of the citizenship question will impose burdens on at least some subgroups of citizens, particularly Hispanics. Secretary Ross’s further claim that there is no “definitive, empirical support” for the belief that adding a citizenship question could reduce response rates among subgroups such as noncitizens is also incorrect. Indeed, a review of the scientific literature examining survey participation—together with the Census Bureau’s own internal analyses regarding the possible effect of the inclusion of the citizenship question on Census response rates—consistently indicate that adding the citizenship question will depress participation in the 2020 census, particularly among noncitizens and Hispanics.⁴⁴

⁴¹ U.S. Census Bureau (2017).

⁴² Studies were previously conducted before and after the 2010 decennial, in 2008 and 2011.

⁴³ Ross Memo (March 26, 2018), at AR-001317.

⁴⁴ There are two reasons to separately consider the categories of noncitizens and Hispanics. First, citizenship cannot always be fully determined—because a significant percentage of noncitizens are Hispanic (Bond et al., 2014), the Hispanic category captures noncitizens who would otherwise be missed or allows for analysis that could not otherwise be conducted. A second, and perhaps more important, reason for considering Hispanics, is based on the evidence reviewed that even Hispanic American citizens are likely to be impacted.

i. Evidence that the Citizenship Question Will Reduce Participation in the Census among Hispanics

Census Bureau Data Stewardship Policies identify citizenship as a “sensitive topic.”⁴⁵ In fact, of the questions planned for the decennial short form, *only* the citizenship question has this sensitive designation.

In his deposition, the chief scientist of the Census Bureau, Dr. John Abowd, affirmed that a citizenship question would be considered sensitive for Hispanic respondents.⁴⁶ He also links that assessment to the perceived burden of the survey. He explains that he disagrees with Secretary Ross that a citizenship question “is no additional imposition;” he also recalls that the original memo used the word “burden” rather than “imposition,” but he advised such a claim could not be supported given the broad definition of survey burden used by survey methodologists.⁴⁷

Critically, the available evidence indicates that there is a differential concern over a citizenship question between Hispanics and Whites, concerns have grown in recent years, and it has a negative impact on survey participation.

Perhaps most significantly, various internal Census Bureau analyses of patterns of response to the ACS indicate that a citizenship question, specifically, will decrease response rates and the data quality among Hispanic respondents. The ACS is a mandatory sample survey administered to approximately two percent of the population annually. The ACS replaced the decennial long-form in 2005 after a decade of testing.⁴⁸ Unlike the decennial census questionnaire distributed to the entire population, the ACS contains a question concerning citizenship.

As reported Dr. Abowd’s January 19 memo, internet item nonresponse rates to the citizenship question on the 2016 ACS—that is, the percentage who skipped the citizenship question—were 15.5% for Hispanics compared to just 6.2% for Whites.⁴⁹ Critically, this differential in item non-response does not appear to be simply a function of higher non-response rates on survey questions generally among Hispanics as compared to Whites, as the item nonresponse rate for the citizenship question was higher than for the other questions to be asked on the 2020 decennial census. For example, Bureau research finds that, among Hispanics, item nonresponse on citizenship increased between 2013 and 2016, while it actually decreased on sex.⁵⁰

⁴⁵ For example, see the Data Stewardship Executive Policy Committee, *DS-16 Checklist for a Survey’s Handling of Sensitive Topics and Very Sensitive Topics in Dependent Interviewing*, https://www2.census.gov/foia/ds_policies/ds016_checklist.pdf.

⁴⁶ J. Abowd Dep., dated Aug. 15, 2018, at 205:13.

⁴⁷ J. Abowd Dep., dated Aug. 15, 2018, at 172:8.

⁴⁸ The sampling design of the ACS allows for 5-year national estimates to be calculated.

⁴⁹ Abowd Memo (Jan. 19, 2018), at AR-001280.

⁵⁰ Brown et al. (Aug. 6, 2018), at COM_DIS00009841.

Analysis of “break-offs” in the 2016 internet ACS self-responses—that is, an analysis of individuals who begin the survey but then discontinue answering questions—similarly shows that Hispanic respondents were more likely to break-off during the survey than Whites (17.6% compared to 9.5%), but Hispanic respondents were nine times as likely as Whites to break-off at the citizenship question.⁵¹ Dr. Abowd testified that “survey methodologists at the Census Bureau think that these break-off rates are very important indicators of sensitive questions”—this analysis clearly indicates the differential sensitivity of this item for Hispanics, and thus, the likely differential impacts from the addition of this question on the decennial.⁵²

Comparable analyses for the 2017 ACS—the first data collection of the Trump administration—have not yet been released, but there is qualitative research that indicates increased concerns, particularly among immigrants,⁵³ in confidentiality can be expected since the 2016 presidential campaign. For example:

- In September 2017, the Census’ Center for Survey Measurement (CSM) sent a memorandum to the Associate Directorate for Research and Methodology titled “Respondent Confidentiality Concerns.”⁵⁴ The memo documented “a ‘new phenomenon’ in the field and reported that respondents’ fears, particularly among immigrant respondents, have increased markedly this year.”
- In a research presentation at the American Association of Public Opinion Research, Census researchers Mikelyn Meyers and Patricia Goerman explained that respondents were “spontaneously expressing concerns about confidentiality during multilingual pretesting projects conducted in 2017 – Respondents referenced legal residency status, immigration, and certain current events like changes to the DACA program.”
- In a study of qualitative interviews to do language testing, Census researchers have said immigrants they interviewed spontaneously raised topics like the travel ban and the dissolution of Deferred Action for Childhood Arrivals, a program that has protected from deportation young immigrants brought to the country as children without legal status.

⁵¹ Calculated using AR- 0009692. Similarly, Hispanics were ten times as likely as Whites to break-off at the year of entry item. Because the provided numbers were calculated such that the numerator was the breakoff at each questions and the denominator is the total of times that question was reached, we are unable to estimate the cumulative break-off differential associated with these sensitive items.

⁵² J. Abowd Dep., dated Aug. 15, 2018, at 102:20-22.

⁵³ I note that the survey research in these bullet points pertains to immigrants rather than Hispanics specifically—but Hispanics are more likely than Whites to be immigrants and to live in a household with immigrants (Bond et al. 2014).

⁵⁴ U.S. Census Bureau (September 20, 2017), Center for Survey Measurement, Respondent Confidentiality Concerns, *Memorandum for Associate Directorate for Research and Methodology*, <https://www2.census.gov/cac/nac/meetings/2017-11/Memo-Regarding-Respondent-Confidentiality-Concerns.pdf>.

- In a presentation to the National Advisory Committee, Mikelyn Meyers discussed an “unprecedented groundswell in confidentiality and data-sharing concerns, particularly among immigrants or those who live with immigrants, may present a barrier to participation in the 2020 census.”⁵⁵

Evidence of these differential concerns among Hispanics can also be seen in the 2011 CBAMS, which measures attitudes towards and knowledge of the Census, potential motivators and barriers to participation, assessments of census messages, and demographics. A cluster analysis identified five distinct attitudinal segments or mindsets within the population, including 14% labeled “Suspicious,” which is described as the segment that has “the lowest self-reported intent to respond to the census ... and are the most likely to believe that the census can harm them.” Hispanics make up a disproportionate share of this mindset, making up 20% in this segment compared to their 14% share in the sample overall.⁵⁶ It is also telling that all of the CBAMS surveys—including that for 2020—ask only place of birth but not citizenship status, so they are unable to explicitly examine variation in attitudes by citizenship status.⁵⁷ Only the 2020 CBAMS focus groups, which continued after the announcement of the citizenship question, includes explicit discussion of the confidentiality concerns as they relate to a citizenship question on the 2020 decennial.⁵⁸ As noted, the Census Bureau has not released the most recent CBAMS results.

These findings are also apparent in public opinion polling data, which similarly suggests that Hispanics will be disproportionately concerned about the confidentiality of the citizenship question. For example:

- A UCLA Luskin Institution Survey of Los Angeles County in 2017 found that 56% of Latinos report being worried about the deportation of themselves or a friend or family member, compared to only 19% of Whites.
- In a national poll of Hispanics following the 2016 election, the Pew Research Center found that 47% of all Hispanics have “a lot or some” worry that they, a family member, or a close friend could be deported. The numbers were even higher for foreign-born Hispanics: 52% for foreign-born U.S. citizens, and 66% for non-citizens.⁵⁹

⁵⁵ Mikelyn Meyers (Nov. 2, 2017), U.S. Census Bureau, Respondent Confidentiality Concerns and Possible Effects on Response Rates and Data Quality for the 2020 Census, p. 15.

<https://www2.census.gov/cac/nac/meetings/2017-11/Meyers-NAC-Confidentiality-Presentation.pdf>

⁵⁶ Nancy Bates, Monica J. Wroblewski, and Joanne Pascale (2012), “Public Attitudes Toward the Use of Administrative Records in the U.S. Census: Does Question Frame Matter?” *Survey Methodology* #2012-04, Center for Survey Measurement, U.S. Census Bureau;

<https://www.census.gov/srd/papers/pdf/rsm2012-04.pdf>

⁵⁷ U.S. Census Bureau, 2020 Census Planning Survey, form CM-Q14 (11-07).

⁵⁸ J. Abowd Dep., dated Aug. 15, 2018, at 209:6-15.

⁵⁹ Mark Hugo Lopez and Molly Rohal (February 2, 2017), “Latinos and the New Trump Administration: Growing Share say situation of U.S. Hispanics is Worsening,” Pew Research Center.

Academic research has found confidentiality concerns to have an impact on other civic behaviors. For example:

- Hispanics disproportionately responded to the 2011 Alabama Taxpayer and Citizen Protection Act, which required schools to ask parents or guardians of students to submit their children's birth certificates or to notify the schools of children's citizenship when enrolling them. Despite the mandatory attendance laws for school-age children and disclosure protections (schools were to report only aggregate numbers of enrolled noncitizens), the Alabama Department of Education estimated that 2,285 Hispanic students—7% didn't attend classes — about double the usual absentee rate.⁶⁰
- Health advocacy organizations report that the number of legal immigrants from Latin America enrolled in federally subsidized insurance plans and using public health services has declined since Trump's election.⁶¹
- Empirical research documents both direct effects—e.g., non-citizen parents failing to sign up citizen children for healthcare for fear of revealing themselves, as well as indirect effects, whereby the effects are observed among those who are not even eligible for deportation.⁶²
- For example, a 2018 study finds significant reductions in food stamp and ACA take-up among citizen Hispanic Americans, even though they are not themselves at risk of deportation. These spillover effects were higher in mixed-status households, areas with a higher incidence of detainments issued for low-level arrests, and areas with greater increases in deportation fear.⁶³

In sum, there is a wealth of evidence suggesting that a citizenship question on the census will depress response rates among Hispanics—including Hispanic citizens.

http://assets.pewresearch.org/wp-content/uploads/sites/7/2017/02/24094450/Latinos_Trump_FULLREPORT.pdf.

⁶⁰ J. Richard Cohen (April 17, 2018), "We already know the citizenship question will hurt the census. Alabama tried it," *The Washington Post*. https://www.washingtonpost.com/opinions/we-already-know-the-citizenship-question-will-hurt-the-census-alabama-tried-it/2018/04/17/395c8cca-41ba-11e8-ad8f-27a8c409298b_story.html?utm_term=.840cb003dfea. The law was subsequently overturned by the courts.

⁶¹ Kelly Kennedy (Jan 22, 2018), "Deportation fears have legal immigrants avoiding health care, Associated Press. <https://apnews.com/9f893855e49143baad9c96816ec8f731> .

⁶² M. Alsan and C. Yang (2018), "Fear and the Safety Net: Evidence from Secure Communities (No. w24731)," *National Bureau of Economic Research* <http://www.nber.org/papers/w24731.pdf> ; Catalina Amuedo-Dorantes, Esther Arenas-Arroyo, and Almudena Sevilla (2018), "Immigration enforcement and economic resources of children with likely unauthorized parents." *Journal of Public Economics* 158: 63-78; ED Vargas and VD Ybarra (2017), "US citizen children of undocumented parents: the link between state immigration policy and the health of Latino children," *Journal of immigrant and minority health*, 19(4), pp.913-920; ED Vargas and MA Pirog (2016), "Mixed-Status Families and WIC Uptake: The Effects of Risk of Deportation on Program Use," *Social science quarterly*, 97(3), pp.555-572.

⁶³ Alsan and Yang (2018).

ii. Evidence that the Citizenship Question Will Reduce Participation in the Census among Immigrants and Noncitizens

Concerns about confidentiality, and the potential impacts on survey participation, should be most consequential for those facing the greatest disclosure risk—non-citizen households.

In a white paper released in August 2018, the Bureau attempts to assess the impact of the citizenship question using existing response patterns to the ACS compared to administrative records with citizenship status.⁶⁴ The authors conclude that “Hispanics, nonrelatives, and noncitizens are particularly sensitive to answering the citizenship question in the ACS, and that sensitivity has increased in recent years.” The paper included analyses of “unit non-response”—that is, the failure to respond to a survey at all—comparing the difference between noncitizen households and citizen households on the 2010 decennial census to the 2010 and 2016 ACS. The analyses estimate that the presence of a citizenship question is predicted to reduce response rates among noncitizen household response rates, relative to citizen households, from between 5.1 to 11.9 percentage points, depending on the surveys compared and modeling assumptions.⁶⁵ Looking across these estimates, Dr. Abowd predicts that the addition of a citizenship question will reduce non-response rates to the census among noncitizen households by 5.8 percentage points, relative to citizen households. Notably, this estimate is based on the decennial 2010 and 2016 ACS data, and does not account for recent changes in the political context that, as explained below, appear to have rendered questions about citizenship even more sensitive. Similarly, census tracts with the highest concentration of non-citizen households have lower internet self-response rates compared to those with the lowest concentration of noncitizens; those response rates have decreased over time and “show a sharper drop between 2015 and 2016.”⁶⁶

Based on this analysis, Dr. Abowd concluded that it is “a reasonable inference that a question on citizenship would lead to some decline in overall self-response because it would make the 2020 Census modestly more burdensome in the direct sense, and potentially much more burdensome in the indirect sense that it would lead to a larger decline in self-response for noncitizen households.”⁶⁷

⁶⁴ The administrative records used were the Census Numident from the Social Security Administration. Brown et al. (Aug. 6, 2018).

⁶⁵ Brown et al. (Aug. 6, 2018), at COM_DIS00009867, COM_DIS00009868, COM_DIS00009871. Models vary depending on the surveys used, the 2010 decennial census compared to the 2010 ACS or 2016 ACS, and the assumptions made about cases with missing citizenship values in the administrative records, the use of ACS weights, and the use of controls for other ACS variables.

⁶⁶ Brown et al. (Aug. 6, 2018), at COM_DIS00009844.

⁶⁷ Abowd Memo (Jan. 19, 2018), at AR 001281.

**iii. Evidence that the Census Bureau's Analysis of the Effect of the
Citizenship Question on Reducing Response Rates Is Conservative**

The Bureau's analysis regarding the effect of the citizenship question on response rates—including Dr. Abowd's estimate of an increase in noncitizen and citizen differential self-response rate of 5.8 percentage points—offers convincing evidence that adding a citizenship question will reduce the accuracy and fairness of the 2020 Census count. But I conclude that it is too conservative of an estimate; there are several reasons to expect an even larger differential nonresponse rate.

First, the analysis was based on a dataset that individually linked ACS responses with administrative records, but each of these files are more likely to be missing non-citizen and Hispanic households, exacerbating potential coverage bias in the resulting estimates. That is, those who could be successfully linked to administrative records and answered the ACS are likely different from those who did not. Regarding the ACS, Bureau research has found that “coverage factors are particularly high for male Hispanics suggesting that, among the foreign-born population, this group has the highest rate of undercoverage in the ACS.”⁶⁸ Regarding the administrative records, both Dr. Abowd (Census Bureau chief scientist) and Dr. Jarmin (current Census Bureau Acting Director) have acknowledged that they are less likely to be available and accurate for HTC populations.⁶⁹ Regarding the matched analysis, the analysts acknowledge that the “missing data are higher for administrative records (AR) than the ACS, and both sources' rates are higher for minorities and nonrelatives.”⁷⁰ As just one indication of the direction of this bias, the item nonresponse rate in the matched 2016 ACS sample was under 2% compared to an item nonresponse rate for the citizenship question in the full 2016 ACS of 6%.⁷¹ In other words, the estimates were calculated on a sample of respondents who have a higher propensity to respond compared to those not in the sample. The authors of the August 2018 white paper acknowledge as much in discussing the use of ACS weights: “the methods used to adjust the ACS weights for survey nonresponse and to allocate citizenship status for item nonresponse assume that the citizenship status distribution of the sampled non-respondents is statistically the same as that of respondents with similar related characteristics...our unit and item nonresponse analysis in Section 3.1 casts serious doubt on this assumption.”⁷² As the authors

⁶⁸ EB Jensen, R. Bhaskar and M. Scopilliti (2015), Demographic analysis 2010: Estimates of coverage of the foreign-born population in the American Community Survey. Population Division, US Census Bureau, Working Paper (103), pp. 15. <https://www.census.gov/content/dam/Census/library/working-papers/2015/demo/POP-twps0103.pdf>.

⁶⁹ R. Jarmin Dep., at 286: 16-20.

⁷⁰ Brown et al., (Aug. 6, 2018) at COM_DIS00009848.

⁷¹ The place of birth item that proceeds the citizenship question had an item nonresponse rate of 9.1% and the year of naturalization of 22.5%. Brown et al., (Aug. 6, 2018) at COM_DIS00009840 (Matched ACS) and COM_DIS00009896 (Full ACS).

⁷² COM_DIS00009850. Other modeling decisions are also likely to bias downward the estimate: the assumption that foreign born individuals with missing citizenship status in the administrative records are all U.S. citizens, the inclusion of English language ability in the Blinder-Oaxaca Decomposition, the failure

conclude, “the estimated effect...is conservative” and “a preferable test would be a randomized control trial (RCT).”⁷³

Second, as discussed in more detail in the next section, the design and prominence of the citizenship question in the decennial short form compared to the ACS could amplify the differential impact of the question for Hispanics and non-citizens relative to Whites.

Third, the analysis is restricted to non-citizen compared to citizen households, whereas I have outlined reasons to expect the scope and impact on a broader segment of the population of immigrants and Hispanic citizens, who are often geographically clustered with noncitizen households considered in the Bureau analysis. While the Census Bureau’s data does not present information that allows one to examine the same empirical patterns as we can for Hispanics, survey methodology research would predict similar effects for other geographically-concentrated immigrant communities. Also likely to bias downward the estimates is the decision to consider a baseline of only citizen households, rather than White citizen households.

Finally, a change in survey climate between 2020 compared to 2010 is likely to exacerbate the sensitivity of the citizenship question. It is widely recognized by public opinion experts—and the Bureau—that the sociopolitical climate is another factor that can affect census participation.⁷⁴ As Dr. Abowd explained in his deposition: “The conduct of the census depends a lot on its design and successful execution. It also depends on the macro environment in which it’s conducted.”⁷⁵ The 2020 count approaches at a time of heightened fears about deportation of undocumented immigrants and vivid examples of anti-immigrant sentiment within the public and from the Trump administration. There are, of course, many examples of anti-immigrant statements from the president.⁷⁶ Policy proposals to build a border wall, to ban immigrants from predominantly Muslim countries, to end the Deferred Action for Childhood Arrivals (DACA) program, and the zero-tolerance policy separating immigrant children from parents indicates this sentiment are not simply empty rhetoric. For example, research has documented a spike in negative news coverage of Hispanics and immigrants in 2016 compared to the previous 30 years.⁷⁷

to account for attrition bias in the SIPP analysis, the use of all citizen households rather than White citizen households.

⁷³ Brown et al. (Aug. 6, 2018), at COM_DIS00009871.

⁷⁴ Groves et al. (2009); J. Abowd Dep., dated Aug. 15, 2018, at 222.

⁷⁵ J. Abowd Dep., dated Aug. 15, 2018, at 222: 21-22.

⁷⁶ Trump quotes include “These aren’t people, these are animals.” “When Mexico sends its people, they’re not sending their best...They’re bringing drugs. They’re bringing crime. They’re rapists.” He commented that illegal immigrants “infest our Country.”

⁷⁷ Nicholas Valentino, James Newburg and Fabian Neuner (2018), “Dog Whistles to Bullhorns: Racial Rhetoric in Presidential Campaigns, 1984-2016” Presented at the 2018 Annual Meeting of the American Political Science Association, Boston, MA.

This anti-immigrant sentiment has stoked fears among immigrants and Hispanics. A Pew Research Center analysis finds that the percent of Hispanics who trust the government in Washington to “always” or “most of the time” do the right thing has declined since 2010, from 37% in 2010 to 23% in 2017.⁷⁸ Empirical research has also documented that local and state-level enforcement policies and practices finds spill-over effects in which Hispanic who are U.S. citizens report poorer psychosocial wellbeing from the anti-immigrant sentiment.⁷⁹

It is also important to recognize that the nature of the Secretary’s decision—without extensive planning and testing—is likely to shape the interpretation of or perceived intent of the survey, both of which can have an impact on if and how someone responds.⁸⁰ Research in previous censuses show that people are not aware of how the census data are used, with nearly half of those surveyed thought that names, addresses, and other information would be shared with other government agencies, increasing the likelihood that the decision process could impact response to the question addition.⁸¹ The Bureau views it as critical that their data collections are viewed as credible by the public. For example, in response to a GAO proposal for an innovative, anonymized approach for measuring aggregated levels of undocumented status (called the “three card” approach), the Acting Director James Holmes offered his opposition on the following basis: “A survey designed to provide estimates of the undocumented population, even if the respondent is asked to respond to a category including undocumented along with other immigration statuses (as in the case of the three-card method), would seriously risk compromising the Census Bureau’s ability to maintain the trust and cooperation of the public in carrying out its surveys and censuses, including most notably the 2000 decennial census of population and housing.”⁸² Adherence to survey methodology best practices and processes is one of the ways that the Bureau fosters trust, credibility, and cooperation. As explained in more detail below, the last-minute process for adding the citizenship question has not followed standard Census Bureau process or procedure and this fact is also likely to have a negative impact on response rates.

In sum, with regard to Secretary Ross’ observations, no prediction of future events can ever be “definitive,” as that is not a science-based standard. There is ample empirical support, as well as well-grounded science of survey methodology, which all consistently point to the same

⁷⁸ Pew Research Center (Dec. 14, 2017) Public Trust in Government: 1958-2017. <http://www.people-press.org/2017/12/14/public-trust-in-government-1958-2017/>.

⁷⁹ Lorraine Moya Salas, Cecilia Ayón, and Maria Gurrola (2013), “Estamos traumatizados: The effect of anti-immigrant sentiment and policies on the mental health of Mexican immigrant families.” *Journal of Community Psychology* 41, no. 8: 1005-1020; Quiroga Szkupinski DM Medina, and J. Glick (2014), “In the belly of the beast: Effects of anti-immigration policy on Latino community members,” *American Behavioral Scientist*, 58(13), p. 1723-1742.

⁸⁰ Tourangeau, Rips, Rasinski (2000).

⁸¹ Singer, Hoewyk, and Neugebauer (2003); Eleanor Singer et al. (2001). “Final Report on the 1999-2000 Surveys of Privacy Attitudes,” Washington, DC, US Bureau of the Census, Planning, Research and Evaluation Division, December 10.

⁸² U.S. General Accounting Office. (1999), An Innovative Technique for Estimating Sensitive Survey Items, p. 78, <https://www.gao.gov/new.items/gg00030.pdf>.

conclusion: the addition of a citizenship question is highly likely to reduce response rates and data quality among non-citizens and Hispanic households.

V. The Inadequacy of Pre-Testing of the 2020 Census Questionnaire with the Inclusion of the Citizenship Question

In explaining his decision to add a citizenship question, Secretary Ross wrote, “the Departments review found that limited empirical evidences exists about whether adding a citizenship question would decrease response rates materially.”⁸³ As explained above, this assertion is incorrect, as there is consistent evidence suggesting that the citizenship question will reduce response rates among subpopulations for whom the question is sensitive.

Perhaps more fundamentally, however, Secretary Ross’s conclusion contravenes survey methodology best practices and the standard practices of the Bureau. Secretary Ross appears to have set a standard that would require affirmative evidence of harm—without an explicit testing and evaluation program—before deciding *against* implementation of a change to the census. Scientifically appropriate methodological practices would require evidence that a proposed change to the questionnaire will *not* harm data quality *before* implementing that change. As the saying goes, “absence of evidence is not evidence of absence.” Per the “Census Bureau Standard: Pretesting Questionnaires and Related Materials for Surveys and Censuses,” the minimal standard explicitly states “if there is insufficient evidence about how well a question performs, the question must be subjected to some form of questionnaire pretest.”⁸⁴

More direct evidence about the impact of adding the citizenship question could have been developed if the decision process followed standard Census Bureau practices regarding pre-testing of survey questionnaires. As explained below, adequate pre-testing consistent with survey methodology best practices did not occur prior to the decision to include a citizenship question on the 2020 census.

A. Background on Scientifically Appropriate Pre-Testing of Survey Questionnaires

Pre-testing questions and survey instruments is an essential step in the survey process, as recognized in the survey methodology literature and by the Bureau.⁸⁵ Pretesting is necessary to evaluate the performance of a question and instrument, helping to determine whether components of the design might degrade data quality. Extensive survey methodology research—including work by the Bureau—demonstrates that even minor variations in the

⁸³ Ross Memo (March 26, 2018), at AR-001317.

⁸⁴ CZF Clark, R Tinari R Singh A Tupek H Hogan, RA Killion & T Wright (2003), *Census Bureau Standard: Pretesting Questionnaires and Related Materials for Surveys and Censuses*.

⁸⁵ T. DeMaio (2005), *Standards for Pretesting Questionnaires and Survey Related Materials for U.S. Census Bureau Surveys and Censuses*; Paul Biemer and Lars E. Lyberg (2003). *Introduction to survey quality*. Vol. 335. John Wiley & Sons.

design of a questionnaire can lead to unanticipated differences in response patterns.⁸⁶ Design features like mode, survey question order, wording, and instructions can have significant consequences for unit nonresponse, item nonresponse, and the honesty of responses provided.⁸⁷

Pre-testing is especially critical for questionnaires that include sensitive questions.⁸⁸ Importantly, a question cannot be understood in isolation of other design decisions (mode, question order, etc.). Research has shown, for instance, that respondents are more likely to give socially desirable answers in interviewer-administered surveys compared to self-administrated questionnaires. Research has also shown that, beyond the wording of a question, question order and context can shape perceptions of intent and burden, thus determining if a respondent breaks off (i.e., exits the survey without finishing) or refuses to answer.⁸⁹ Research specific to sensitive questions emphasizes the importance of embedding the sensitive question in a carefully constructed context to “reduce the focus on a specific behavior question.”⁹⁰

A variety of methodological approaches exist for evaluating individual questions and instruments, and the Bureau regularly uses these pretesting approaches in the survey development process.⁹¹ While all of the methods share the common goal of helping to maximize data quality, they vary in the types of problems they identify.

- Focus groups are typically used early in the questionnaire development process to gauge respondent understanding of a topic, including how they think about a topic and their opinions about question sensitivity.
- Expert reviews by survey methodologists are used to identify theoretical or practical considerations in the questionnaire development process.
- Cognitive interviews—in which a researcher probes a respondent about their thought processes as they complete the questionnaire—are used to evaluate the question-answering process, including question comprehension, interpretation of question, and the presumed intent of the question. Cognitive interviewing is typically an iterative process—

⁸⁶ For example, see CE Bennett and DH Griffin (2002), Race and Hispanic Origin Data: A Comparison of Results from the Census 2000 Supplementary Survey and Census. In 2002 Proceedings of the American Statistical Association, Section on Survey Research Methods. American Statistical Association.

⁸⁷ Groves et al. (2009).

⁸⁸ S. Presser, M. Couper, J. Lessler, E. Martin, J. Martin, J. Rothgeb, and E. Singer (2004), “Methods for testing and evaluating survey questions,” *Public opinion quarterly*, 68(1), pp.109-130.

⁸⁹ Frauke Kreuter, Stanley Presser, and Roger Tourangeau (2008), “Social Desirability Bias in CATI, IVR, and Web Surveys The Effects of Mode and Question Sensitivity.” *Public opinion quarterly* 72, no. 5: 847-865; Tourangeau and Yan 2007.

⁹⁰ Seymour Sudman, and Norman M. Bradburn (1982), “Asking Questions.” *San Francisco: Josey-Bass Inc. Publishers* (1982), p. 61.

⁹¹ Office of Management and Budget (Jan. 2016), Evaluating Survey Questions: An Inventory of Methods. Statistical Policy Working Paper 47. Statistical and Science Policy Office, Washington, D.C <https://www.bls.gov/osmr/spwp47.pdf>.

changes are made to the questionnaire and then new cognitive interviews are conducted to evaluate those changes.⁹²

- Field testing evaluates questionnaires in conditions as close as possible to that of the actual survey. Analyses of field test data often include examining a number of quality metrics such as item nonresponse, break-offs, response latency, “don’t know” responses, and straight-lining can be valuable in identifying data quality issues.
- When pretesting identifies quality issues or issues are anticipated, randomized experiments are used to make evidence-based decisions about the design.

As part of the Census Quality Standards, Sub-Requirement A2-3.3 requires that “Data collection instruments and supporting materials must be pretested with respondents to identify problems (e.g., problems related to content, order/context effects, skip instructions, formatting, navigation, and edits) and then refined, prior to implementation, based on the pretesting results.”⁹³

Evidence of these practices are evident in the August 2017 infographic titled “How a Question Becomes Part of the American Community Survey,” which states that “Adding or making a change to the American Community Survey involves extensive testing, review, and evaluation over a 5-year period. This ensures the change is necessary and will produce quality, useful information for the nation.”⁹⁴ These guidelines further explain that “When surveys or censuses are administered using multiple modes and meaningful changes to questions are made to accommodate the mode differences, all versions must be pretested...Data collection instruments in any languages other than English must be pretested in the languages that will be used to collect data during production. Pretesting supporting materials in these languages is not required but is recommended.”⁹⁵

B. Pre-Testing of the 2020 Census

With respect to the 2020 decennial census, pretesting and preparation began even before the 2010 decennial count was complete. In the decade before the decennial census, the Bureau conducts several large tests, contacting tens of thousands of addresses, to optimize the data collection procedures. These tests culminate with an end-to-end census test that is a comprehensive field test or dress rehearsal of the actual decennial census encompassing every stage of the census count. In a 2018 press release, the end-to-end test is described as “a critical part of preparations for the nation’s upcoming 2020 Census” and “The 2018 Census Test will

⁹² Beatty and Willis (2007).

⁹³ [U.S. Census Bureau Statistical Quality Standards, \(July 2013\),
https://www.census.gov/content/dam/Census/about/about-the-bureau/policies_and_notices/quality/statistical-quality-standards/Quality_Standards.pdf](https://www.census.gov/content/dam/Census/about/about-the-bureau/policies_and_notices/quality/statistical-quality-standards/Quality_Standards.pdf), p. 8,
<https://www.census.gov/about/policies/quality/standards/standarda2.html>.

⁹⁴ Guidelines for Designing Questionnaires for Administration in Different Modes, 207.

⁹⁵ Ibid.

help the Census Bureau validate its readiness for 2020 Census operations, procedures, systems and field infrastructure for the once-a-decade census.”⁹⁶

In preparing for the 2020 Census, the Bureau engaged in an extensive content review that included internal testing and evaluation, engagement with stakeholders, and consultation with experts. In presenting the 2020 Census topics to Congress (as required by March 31, 2017), the Bureau explained their content review: “To prepare for the 2020 Census, OMB and the Census Bureau embarked on a comprehensive review including chartering the Interagency Council on Statistical Policy (ICSP) Subcommittee on the ACS and conducting the 2014 ACS Content Review. This effort was designed to examine and confirm the value of each question on the ACS, and to confirm and update the statutory and regulatory authority for the questions with federal agencies. In 2016, the Bureau asked federal agencies to provide any updates to this documentation.”⁹⁷ No federal agency requested the addition of the citizenship question in response. And the 2017 presentation of topics did not mention the addition of citizenship on the decennial questionnaire.

There are two well-known examples of recent content evaluations which highlight the role of testing: the evaluation of a combined race and ethnicity question (not adopted) and revisions to the decennial relationship question to capture same-sex relationships (adopted). Both underwent multi-year testing, evaluation, and collaboration with experts and stakeholders. Specifically:

- Relationship response options were tested in the 2013 ACS Questionnaire Design Test (QDT), the Department of Housing and Urban Development’s 2013 American Housing Survey (AHS), the tests leading up to the 2014 panel of the Survey of Income and Program Participation (SIPP), and decennial tests—the 2012 National Census Test, 2014 Census Test, 2015 Optimizing Self-Response Test, 2015 National Content Test, 2016 National Content Test, 2017 Census Test, and 2018 End-to-End Census Test.
- Research on the combined race and ethnicity question started with the 2008 design of the 2010 Census Alternative Questionnaire Experiment (AQE) Research on Race and Hispanic Origin; the final report and recommendations were issued in February 2017 after careful analysis of the 2015 National Content Test, numerous public dialogues, and collaboration with other federal statistical agencies through a Federal Interagency Working Group for Research on Race and Ethnicity.

Even before the addition of the citizenship question, the Government Accountability Office had designated the 2020 decennial census as high risk and had emphasized the importance of testing and evaluation to mitigate risks to census accuracy and costs. The GAO advised that the

⁹⁶ <https://www.census.gov/programs-surveys/decennial-census/2018-census-test.html>.

⁹⁷ U.S. Census Bureau (March 2017) Subjects Planned for the 2020 Census and American Community Survey: Federal Legislative and Program Uses, <https://www.census.gov/library/publications/2017/dec/planned-subjects-2020-acs.html>.

Bureau “must also rigorously test individual census-taking activities to provide information on their feasibility and performance, their potential for achieving desired results, and the extent to which they are able to function together under full operational conditions.” The report concluded that “it will be imperative that the Bureau have systems and operations in place for the 2018 End-to-End Test.”⁹⁸ Similarly, another GAO report notes that the cancellation of the 2017 Census Test “represents a lost opportunity to test, refine, and integrate operations and systems, and it puts more pressure on the 2018 Test to demonstrate that enumeration activities will function as needed for 2020.”⁹⁹ The 2018 End-to-End Test did not include a citizenship question.

In sum, pretesting is a fundamental part of the survey development process and standard practice for census surveys. It not only helps to ensure that the design maximizes data quality, resulting in a fair and accurate count, it also signals the credibility and integrity of census decision making. As documented below, the addition of a citizenship question to the decennial questionnaire did not follow such a process.

C. The Addition of a Citizenship Question Without Adequate Pre-Testing and Consultation with Experts

It is fundamental principal of scientifically appropriate survey methodology practices and the standard practices of the Bureau that there must be thorough testing and evaluation of a decision to change a survey instrument to determine that the change will not harm the data quality before implementation. While it is theoretically and historically possible to ask sensitive questions on government surveys in a way that collects high quality data, doing so requires careful planning, testing, evaluation, consultation with experts and advisors, and engagement from stakeholders. From my review of the record, none of that has not occurred here.

There has been no pretesting of the 2020 Census questionnaire with the inclusion of the citizenship question. Particularly given the evidence that the citizenship question is sensitive for particular hard-to-count populations and could exacerbate the undercount, pre-testing in this context is critical.

Experts and stakeholders understand the importance of pretesting. For example

- Writing in opposition of the addition of a citizenship question, six former Census Directors (who served under Republican and Democratic presidents) wrote, “There is a well-proven multi-year process to suggest and test new questions. We strongly believe that adding an untested question on citizenship status at this late point in the decennial planning process

⁹⁸ U.S. General Accounting Office (2017), Progress on Many High-Risk Areas, While Substantial Efforts Needed on Others GAO-17-317: <https://www.gao.gov/products/GAO-17-317> p. 224.

⁹⁹ GAO-17-317, p. 226.

would put the accuracy of the enumeration and success of the census in all communities at grave risk.”

- The National Academics of Sciences, Engineering, and Medicine’s Committee on National Statistics (CNSTAT) Task Force on the 2020 Census concluded that “The late-stage insertion of a new and untested question in the 2020 census would almost certainly have damaging effects on the 2020 decennial census.”
- The CNSTAT Task Force further explains that “This endeavor risks undermining the credibility of the Census Bureau and the decennial census, the trust of its respondents, and the independence of the Census Bureau’s professional staff to develop, produce, and disseminate objective information while protecting the confidentiality of respondents”(9) and is inconsistent with “the proper performance of the functions” of The Bureau in part because “Adding a citizenship question without proper testing will, in our judgment, impair the quality of the 2020 Census as a whole.”
- The Census Bureau’s Scientific Advisory Committee (CSAC) issued the following statement: “We have concerns about the lack of adequate testing, about the implications for nonresponse (unit and item), implications for the cost, and implications for attitudes about the Census Bureau and concerns about confidentiality.”

i. Secretary Ross’s Reliance on ACS Testing

In his memo, Secretary Ross asserted that a citizenship question has already been “well tested” because it appeared on the American Community Survey.¹⁰⁰ That is incorrect, as the testing of the citizenship question on the ACS cannot be considered adequate pretesting for the 2020 census questionnaire featuring a citizenship question in accordance with scientifically appropriate survey methodology processes and standards. As explained in the CNSTAT statement noting its opposition to the addition, the experience of the ACS, “does not constitute sufficient evidence to argue that it is a tested and proven method of measurement for the 2020 census.”

To understand the inadequacy of the process by which the Commerce Department is choosing to add the citizenship question in what was already a stressed testing environment, it is useful to distinguish the pretesting of a *question* versus pretesting of a *questionnaire* or survey instrument on which the question is included. While the citizenship question has been asked on the ACS, the 2020 census *questionnaire* featuring a citizenship question has not been pretested. Such pretesting of the complete questionnaire is critical for survey quality.¹⁰¹ Indeed, following the Secretary’s request to add a citizenship question, the Bureau designed a

¹⁰⁰ Ross Memo (March 26, 2018), at AR-001314.

¹⁰¹ Presser et al. (2004).

randomized control trial field experiment—the most compelling method—to test the impact of question wording (ACS wording vs. Current Population Survey wording) and question order (inclusion vs. exclusion of lead-in nativity question) compared to a control group questionnaire without a citizenship question.¹⁰² Dr. Abowd was given a “no-go” on the experiment by the acting director and acting deputy director.¹⁰³

As noted, survey methodologists have shown that the question order and context—not just the question wording—is relevant to evaluating data quality, unit and item nonresponse. This point has been recognized by survey methodologists in the Bureau. The Bureau’s Statistical Quality Standards state that “an existing data collection instrument has substantive modifications” when “existing questions are revised or new questions added.”¹⁰⁴ As recognized in *The Census Bureau Standard: Pretesting Questionnaires and Related Materials for Surveys and Censuses*: “Seemingly minor changes in question wording or sequence sometimes can affect survey responses in important and unexpected ways. Similarly, any systematic change in the survey process (such as mode of interviewing, same design, edit routines, or field procedures) can also result in a change in survey estimates.”¹⁰⁵ Thus, adequate pre-testing requires pre-testing of a complete survey questionnaire before it is deployed, rather than simply testing individual questions from the survey.

The simple fact that a particular question has been asked on a previous Census Bureau survey, does not eliminate the need to pretest the revised questionnaire. For example, it surely would be inconceivable that the Bureau would not pretest if the Secretary had instead suggested adding the ACS question asking if “this person have difficulty dressing or bathing?”

Here, there are several key differences in both order and context between the ACS citizenship question and the proposed citizenship question on the decennial census. These differences point to likely bigger effects on differential nonresponse and data quality and, at minimum, demonstrate significant differences across the questionnaires that reveal the need for thorough testing and evaluation.

First, a citizenship question is one of several dozen questions in the ACS. On the decennial census a citizenship question will be one of just 11 questions. The relative prominence of a citizenship question on the census questionnaire as compared to its place on the ACS might be perceived by respondents as signaling the government’s interest in citizenship and legal status—which could, in turn, increase the salience of a citizenship question for respondents. As

¹⁰² J. Abowd Dep., dated Aug. 29, 2018, at 27-28. Brown et al. (2018) similarly note that “a preferable test would be a randomized control trial (RCT).”

¹⁰³ J. Abowd Dep., dated Aug. 29, 2018, at 105:2.

¹⁰⁴ [U.S. Census Bureau Statistical Quality Standards, \(July 2013\), https://www.census.gov/content/dam/Census/about/about-the-bureau/policies_and_notices/quality/statistical-quality-standards/Quality_Standards.pdf](https://www.census.gov/content/dam/Census/about/about-the-bureau/policies_and_notices/quality/statistical-quality-standards/Quality_Standards.pdf), p. 8.

¹⁰⁵ Census Bureau Standard: Pretesting Questionnaires and Related Materials for Surveys and Censuses, Pretest Standards. <https://www.census.gov/srd/pretest-standards.pdf>.

such, it could be more likely to activate confidentiality concerns compared to the question on the ACS. Pre-testing should have been used to determine if the placement and prominence of a citizenship question on the decennial census questionnaire influences the way in which the respondent interprets and evaluates the survey.

Second, the proposed citizenship question on the decennial census is different from that asked on the ACS and from that asked in the 1950 decennial. Citizenship status in the ACS is asked as a branched, follow-up to a question asking place of birth: "Where was this person born?"¹⁰⁶ Only those who were born outside the United States are asked about citizenship status in the ACS internet self-response. In contrast, as submitted to Congress, the decennial will ask about citizenship without a preceding question regarding place of birth—and it will be asked of all individuals. Although Secretary Ross uses the term "reinstatement,"¹⁰⁷ the proposed citizenship question is also different from that asked on the full population census questionnaire in 1950. In 1950, citizenship was asked—by an in-person enumerator—as a branched follow-up to place of birth. That is, the citizenship question was only asked of foreign-born respondents using the following questions: "What State (or foreign country) was he born in?" Followed by "[if foreign born] Is he naturalized? (Yes, No, or born abroad of American parents)."

The noted differences between the ACS and decennial census could shape perceptions about the question intent and burden. Survey methodology research shows that the perceived intent of a question will impact if and how someone responds, and is one of the reasons it is some important to evaluate through cognitive testing how respondents interpret a question.¹⁰⁸ In the ACS (and on the 1950 census), the placement of the citizenship question after a place of birth question might signal the government's interest in patterns of migration—which might not trigger the same sensitivities as a free-standing question about citizenship status.

Third, there is a clear need to do pretesting and to do so in a way that evaluates differences across modes, another survey design factor that has well-documented implications for if and how individuals respond.¹⁰⁹ Pre-testing should have been used to determine if the order of a citizenship question on the decennial census questionnaire influences the way in which the respondent interprets and evaluates the question. By way of comparison, before adding a question regarding the year of a person's naturalization to the ACS occurred only after pretesting, including cognitive interviews and a field test, and the recommendation of the National Academics, an organized panel of experts.¹¹⁰

¹⁰⁶ J. Abowd Dep., dated Aug. 29, 2018, at 17: 11-17.

¹⁰⁷ Ross Memo (March 26, 2018), at AR-001313, 001315, 001317, 001318, 001320.

¹⁰⁸ Tourangeau, Rips, Rasinski (2000).

¹⁰⁹ Elizabeth Martin, Jennifer Hunter Childs, Theresa DeMaio, Joan Hill, Courtney Reiser, Eleanor Gerber, Kathleen Styles, Don Dillman, *Guidelines for Designing Questionnaires for Administration in Different Modes* U.S. Census Bureau, Washington, DC 20233, <https://www.census.gov/srd/mode-guidelines.pdf>

¹¹⁰ "Cognitive interviews are integral to the process of changing survey questions. This type of

Fourth, the Secretary's direction to ask the question at the end of survey further departs from the way the question is asked in the American Community Survey. In his memo, Secretary Ross asserted that placing it at the end of the survey will "minimize any impact on decennial response rates,"¹¹¹ but there is no empirical basis for this statement, which reflects a basic misunderstanding about how the census questionnaire functions for households with more than one member. Respondents are directed to answer all of the questions on the census questionnaire sequentially for each member of their household; thus, respondents will see the citizenship question when they answer the census questionnaire for the first member of the household, and before answering questions about other members of the household (that is, unless the Secretary is proposing a fundamental redesign of the questionnaire from a person-based to a topic-based format).¹¹² On the paper form, respondents can see all of the questions before completing it and, on the Internet self-response form, they can also return to previous questions after seeing the citizenship question. Pretesting would help to understand the effect of placing the citizenship question at the end of the survey.

Fifth, even the respondent who understands that the question is being added for enforcement of the Voting Rights Act might reasonably question why it is necessary ask year of naturalization or to distinguish a U.S. citizen born in Puerto Rico or abroad. Indeed, the Bureau has asked a more simplified version of citizenship status in the Current Population Survey (CPS) that could be preferable in terms of utility and quality. Here again, pretesting could help to determine if the proposed question is the appropriate question to meet the data need.¹¹³ In fact, the RCT that was designed but not implemented, would have tested exactly this.¹¹⁴

Ultimately, cognitive interviews and field testing of the new questionnaire would have helped evaluate how the citizenship question is interpreted in the context of the decennial questionnaire. Even Secretary Ross has acknowledged the need to do testing: "The Census Bureau must test the wording of the new question. It is too late to add a question to the 2018

research is conducted to verify that the potential questions will be readily understood by the public in order to reduce response error. Two rounds of cognitive testing were conducted on the proposed place of birth, U.S. citizenship status, and year of arrival questions."

¹¹¹ Ross Memo (March 26, 2018), at AR-001320.

¹¹² In the first, person-based approach, a series of questions is asked in its entirety about the first person, then the same series is administered again about the next person, and so on (e.g., sex, age, date of birth, Hispanic origin, and race data are gathered for Person 1, then for Person 2, etc.). The alternative topic-based method collects data on a single topic for everyone in the household before moving on to the next topic (e.g., sex is asked for everyone in the household, then Hispanic origin, and so on). Per the Guidelines on: "Guideline 22. Whether an instrument is person- or topic-based should be decided based on evidence about data quality and ease of administration in each mode, and the comparability of data across modes."

¹¹³ S Sudman, N Bradburn, & N Schwarz (1996), *Thinking about answers: The application of cognitive processes to survey methodology*, Jossey-Bass, Inc., San Francisco.

¹¹⁴ J. Abowd Dep., dated Aug. 29, 2018, at 27-28. Brown et al. (2018) similarly note that "a preferable test would be a randomized control trial (RCT)."

End-to-End Census Test, so additional testing on a smaller scale would need to be developed and implemented as soon as possible.”¹¹⁵

As of writing, however, the Bureau confirms to have no such plans.¹¹⁶ Dr. Abowd testified that, with respect to “cognitive testing,” the 2020 census questionnaire was “not adequately tested with the citizenship question.”¹¹⁷ Dr. Jarmin admitted that field testing was not possible given the late decision of the Secretary.¹¹⁸ Moreover, based on reporting in the 2020 Operational Plan, there is not sufficient time to do even the minimum pretesting before 2020 to do comprehensive testing. For example, the 2020 Operational Plan stated: “Any changes to the finalized 2020 Census content will impact all non-English content. IF the final English content changes after April 2018, *THEN there will not be adequate time in the schedule to translate, design, and produce non-English questionnaires for the 2020 Census.*”¹¹⁹

The addition of a citizenship question also undermines the efficacy of the pretesting that was conducted. For example, without the citizenship question, the 2018 End-to-End test does not serve its intended purpose to test nearly all aspects of decennial census operations. The 2020 decennial questionnaire has not been tested in a macro-environment that resembles the actual decennial. The former directors of the Census wrote “Adding a citizenship question without a testing opportunity in a contemporary, census-like environment will invalidate the results and lessons learned from the End-to-End test. Key assumptions underlying estimates of self-response, staffing needs, local office sites, and communication strategies will no longer be sound...In addition, the Census Bureau would need to modify data capture and processing systems, language assistance and enumerator training material, and web-based instructions for completing the census in the time remaining before the 2020 Census states—all without the benefit of field testing.” Indeed, Secretary Ross’s announcement about the questionnaire change was made in the midst of 2018 self-response period, complicating interpretation of the End-to-End response rates.

In sum, the Census Bureau has not followed the appropriate survey design and evaluation process needed to minimize the survey burden. The Bureau failed to follow their own standard process or accepted survey methodology practices to collect additional evidence regarding the likely impact of the questionnaire change. The Bureau’s scientists actually designed a more direct test to more explicitly evaluate the impact of a citizenship question, but ultimately, a decision was made to not conduct such a test.¹²⁰ While Secretary Ross asserted that there is no “empirical” evidence about the impact of the question on response rates, additional empirical evidence about the impact of adding the citizenship question would have been available had the decision followed standard Census Bureau processes.

¹¹⁵ AR- 0009859.

¹¹⁶ J. Abowd Dep., dated Aug. 29, 2018, at 27: 6-9.

¹¹⁷ J. Abowd Dep., dated Aug. 29, 2018, at 142:18 – 143:4.

¹¹⁸ R. Jarmin Dep., dated Aug. 20, 2018 at 298: 9-13.

¹¹⁹ U.S Census Bureau, 2020 Operational Plan v3, p. 72.

¹²⁰ R. Jarmin Dep., dated Aug. 20, 2018 at 304: 4-10.

ii. The Absence of Consultation with Experts and Advisors

Another departure of standard process was the lack of consultation with experts and advisors. For the 2000 and 2010 decennials, the Bureau created a Census Advisory Committee to provide recommendations to the Director of the U.S. Census Bureau. Despite a federal register seeking nominations, the Bureau stopped plans to create a similar committee for 2020. The Bureau has two advisory committees: the National Advisory Committee on Racial, Ethnic and Other Populations (NAC) and the Census Scientific Advisory Committee (CSAC). Neither were consulted in the evaluation of the DOJ request and both have rebuked the Secretary's decision.

The refusal to consult with the Census Bureau's advisory committees has been an atypical process that has served to politicize the decennial count, jeopardized the credibility of the decision, and thus makes it more likely to have a negative impact. For example, following the announcement of Secretary Ross's decision, a #leaveitblank hashtag trended on Twitter. The 2020 Trump for President Campaign and the Republican National Committee are sending fundraising messages about the addition of a citizenship question the census. The email asks supporters to sign a petition to "defend the President" and the decision to add a citizenship question to the census; once someone inputs their information, they are prompted to donate money.¹²¹

VI. The Inadequacy of Plans to Address the Increase in Non-Response Rates among Noncitizens and Hispanics and Prevent an Increase in the Differential Undercount

A decreased willingness to respond to the census among hard-to-count populations due to the inclusion of the citizenship question will translate into an exacerbation of the differential undercount—unless the Census Bureau is able to address that unwillingness through two strategies that the Bureau employs to try to improve the accuracy and fairness of the census count: 1) outreach through partnerships and communications campaigns to encourage census participation, and 2) where individuals fail to respond to the census, through non-response follow up (NRFU) procedures, including the sending of census enumerators to obtain in-person responses from households that fail to respond to the census questionnaire. Here, however, there is no empirical basis to conclude that these strategies will adequately address the effect that including the citizenship question will have on the willingness of members of hard-to-count population to cooperate with the Census, and the empirical studies suggests that these strategies will not be effective.

¹²¹ See messaging online at <https://gop.com/census-survey/>; also see <https://www.cnn.com/2018/03/28/politics/trump-census-citizenship/index.html>.

a. Outreach

Both the 2000 and 2010 U.S. Censuses included a social marketing communications campaign to help encourage self-response. The 2020 Integrated Partnership and Communications campaign has plans to use tailored advertising, partnerships with local organizations, and targeted outreach to immigrant and faith-based organizations to encourage households to self-complete the decennial census. A primary goal of these efforts is to raise awareness and encourage participation “of those are less likely to response or are often missed.”¹²² Unfortunately, there is no evidence that these outreach efforts will counteract the decreased willingness of Hispanics and noncitizens to participate in the Census, and there are indications that these efforts could fall short.

First, the Bureau has not implemented its own plans for outreach around the 2020 census. Following the 2010 Census, the Communications Directorate immediately established a decades-long research plan to inform the 2020 Census communications campaign development. Unfortunately, the plans outlined in the 2020 Census Integrated Communications Plan were scaled back or eliminated due to funding shortfalls.

The Bureau has acknowledged the need to do additional testing after learning of increased confidentiality concerns among HTC segments of the population but has not followed through on those plans. As explained in a recent GAO report “During exchanges of information between the Bureau and its National Advisory Committee in 2017 and 2018, the Bureau proposed using additional focus groups with certain population groups, census interviewers, and trusted community messengers. These focus groups are intended to identify root causes and ways to overcome the confidentiality concerns increasingly being raised by respondents in the Bureau’s earlier testing by helping to inform messaging and outreach plans as well as staff support documents and training materials.”¹²³ The same report includes a footnote, “In technical comments in response to a draft of this report, Bureau officials told us that they do not have plans to conduct the additional proposed focus groups with census interviewers and trusted community messengers.”¹²⁴

Additionally, empirical research on the effectiveness of public information campaigns literature demonstrates the difficulty of having a meaningful impact on public attitudes and behaviors.¹²⁵ The current fragmented and complex information environment makes it more difficult to reach the public.

¹²² See <https://www2.census.gov/cac/nac/meetings/2017-04/2017-ipc-update.pdf>.

¹²³ U.S. Government Accountability Office (July 2018) “Actions Needed to Address Challenge to Enumerating Hard-to-Count Groups, GAO-18-599, p. 22 <https://www.gao.gov/products/GAO-18-599>.

¹²⁴ U.S. Government Accountability Office (July 2018) “Actions Needed to Address Challenge to Enumerating Hard-to-Count Groups, GAO-18-599, p. 22.

¹²⁵ E.g., Kalla, Joshua L., and David E. Broockman (2018), “The minimal persuasive effects of campaign contact in general elections: Evidence from 49 field experiments.” *American Political Science Review* 112, no. 1: 148-166; Hillygus et al. (2006), pp. 8-9.

Second, to the extent messaging campaigns are able to reach the public, they can have the perverse effect of exacerbating participatory inequalities by increasing differentially mobilizing the most advantaged in the population.¹²⁶ If the communication campaign differentially increases the cooperation of Whites, the outreach campaign risks exacerbating the differential count of racial and ethnic minorities. This is a distinct risk for the 2020 decennial because research indicates that confidentiality concerns, compared to other participatory barriers, are especially hard to overcome. For example, internal Census Bureau research found that those who were concerned about privacy could have their attitudes moved on the use of administrative records, whereas those concerned about confidentiality could not.¹²⁷ This finding is also consistent with survey methodology experimental research that has found assurances of confidentiality can sometimes be counterproductive, actually increasing respondent's concerns and increasing reluctance to respond.¹²⁸

These potential challenges point towards the need for additional testing of Census Communications and Outreach. Unfortunately, the current and planned efforts are inadequate for the task. The Gallup tracking poll commissioned by the Census Bureau is a generic attitudinal survey disconnected from the actual behavior of census participation, which has been found to be widely misinterpreted by respondents.¹²⁹ The CBAMS is limited in its ability to understand and solve confidentiality concerns associated with the citizenship question because it does not even collect citizenship status in the survey questionnaire.

In sum, there is simply no evidence that the Outreach effort will be effective at overcoming the predicted decline in self-response rates among non-citizen and Hispanic households.

b. Nonresponse Follow-Up ("NRFU")

Nonresponse Follow-up (NRFU) is the process by which the Census Bureau attempts to collect information from households that do not respond to the census questionnaire. To briefly review the planned NRFU process:

- Every non-responding household will be visited in-person by a census enumerator at least once.

¹²⁶ See review in Hillygus et al. (2006), pp.71-72.

¹²⁷ Nancy Bates, Monica J. Wroblewski, and Joanne Pascale. 2012. Public Attitudes Toward the Use of Administrative Records in the U.S. Census: Does Question Frame Matter? Survey Methodology #2012-04, Center for Survey Measurement, U.S. Census Bureau, <https://www.census.gov/srd/papers/pdf/rsm2012-04.pdf>.

¹²⁸ Singer, Hippler, and Schwarz (1992).

¹²⁹ Jennifer Hunter Childs (May 18, 2018). When Numbers Aren't Enough: Supplement Quantitative Data Collection with Qualitative Insights. Presentation at the American Association for Public Opinion Research, <https://www.census.gov/content/dam/Census/newsroom/press-kits/2018/aapor/aapor-presentation-insights.pdf>.

- If that initial visit does not result in a completed household, administrative records may be used to enumerate those households for which there is high quality administrative data about the household.
- For those households without administrative records, an enumerator will attempt recontact.
- After a third attempt to contact a household does not yield a respondent, a case will become “proxy-eligible.” A proxy is someone who is not a member of the household—such as a neighbor, landlord, Postal worker, or other knowledgeable person who can provide information about the unit and the people who live there. An enumerator will attempt three proxies after each non-interview for a proxy-eligible case.
- If these efforts fail, then a household becomes eligible for what is known as “whole-person imputation” or “whole household imputation,” in which the Bureau imputes a full set of characteristics, including age, sex, and race based on external information such as the characteristics of the neighborhood.¹³⁰

The Census Bureau predicts that the addition of a citizenship question will decrease self-response rates and therefore acknowledges that there will be an increase the workload for the NRFU. An important question here is whether and to what extent NRFU will be successful in enumerating households (and individuals within households) that do not respond to the census questionnaire because of the citizenship question. Dr. Abowd’s January 19 memo, for example, includes an estimate of the costs increase of including the citizenship question on the census, which assumes that 79% of non-citizen households in the NRFU operation will provide information (leaving 21% to receive proxy responses).¹³¹

While Dr. Abowd’s estimate is, in itself, troubling, his assumption that 79% of non-citizens who fail to respond to the census questionnaire because of the citizenship question will instead provide information to an enumerator seems overly-optimistic. Indeed, the Census Bureau’s internal analysis observed that “if a household declines to self-respond due to the citizenship question, we suspect it would also refuse to cooperate with an enumerator coming to their door, resulting in a need to use a proxy.”¹³²

I highlight several reasons to think NRFU will not fully mitigate the differential undercount of non-citizens and Hispanics in the decennial census.

First, even before the addition of the citizenship question, NRFU efforts could not eliminate the undercount in past censuses. The persistent undercounts in the 1990, 2000, and 2010 decennial counts indicate that NRFU efforts do not fully address patterns of differential self-

¹³⁰ U.S. Census Bureau (June 8, 2018), Proposed Information Collection, 2020 Census. Federal Register Notice. Vol. 83 (111), p. 26649.

¹³¹ Abowd Memo (Jan. 19, 2018), at AR-001282.

¹³² Brown et al. (Aug. 6, 2018), at COM_DIS00009874.

response.¹³³ Dr. Jarmin acknowledged in his deposition that NRFU is not equally successful across all groups, with lower rates of success among the hardest to count populations like noncitizens and racial and ethnic minorities.¹³⁴ Even more recent and ominous, the 2016 Census test found that the NRFU operation “proceeded according to the Bureau’s operational plans,” including the use of proxy respondents, but still resulted in 30% non-interview rates in Harris County, Texas and 20% non-interview rates Los Angeles County, California—the 2016 test sites selected because of their hard-to-count tracts.¹³⁵ A recent GAO reports that the Bureau has cancelled three coverage measurement operations from the scope of 2018 End-to-End test, so there will be less up-to-date information about a possible undercount.¹³⁶

Second, the same issues that are likely to depress self-response are also likely to have an impact on a respondent’s willingness to respond to an in-person enumerator. The Census Bureau’s ethnographic research has found that fear of deportation, cultural resistance to government compliance, language barriers, and complex households all contribute to the differential undercounts of racial and ethnic groups.¹³⁷ Bureau focus group research of field representative for the Census 2000 Supplemental Survey reported that respondents living in the country illegally were less likely to cooperate.¹³⁸ In estimating the impact of adding the citizenship question to the 2020 decennial, Bureau researchers noted that “it may not be possible to obtain an accurate enumeration no matter how many times an enumerator knowledge on their door.”¹³⁹

Third, the addition of an in-person interviewer during the NRFU process creates an additional challenge to the survey participation decision. Empirical research finds that respondents are less likely to answer sensitive questions in an interviewer-administered survey compared to a self-administered survey.¹⁴⁰ This effect could be exacerbated in the decennial NRFU compared to the ACS because decennial enumerators tend to have less experience than ACS

¹³³ Thomas Mule (2012), “Census coverage measurement estimation report: Summary of estimates of coverage for persons in the United States.” Washington, DC: US Census Bureau.

¹³⁴ R. Jarmin Dep., dated Aug. 20, 2018 at 284 :15-21.

¹³⁵ U.S. Government Accountability Office (Jan 2017) 2020 Census: Additional Actions Could Strengthen Field Data Collection Efforts. GAO-17-191. <https://www.gao.gov/assets/690/682308.pdf>, pp. 4-5.

¹³⁶ GAO-18-541T, at p. 8.

¹³⁷ De la Puente M (1993) Why are People Missed or Erroneously Enumerated in the Census – A Summary of Findings from Ethnographic Research. Proceedings of the 1993 Research Conference on Undercounted Ethnic Populations. Suitland, MD: US Census Bureau: 29-66; Terry, R.L., Schwede, L., King, R., Martinez, M. and Childs, J.H., 2017. Exploring Inconsistent Counts of Racial/Ethnic Minorities in a 2010 Census Ethnographic Evaluation. *Bulletin of Sociological Methodology/Bulletin de Méthodologie Sociologique*, 135(1), pp.32-49.

¹³⁸ Camarota, S., and Jeffrey Capizzano. “Assessing the quality of data collected on the foreign born: an evaluation of the American Community Survey (ACS).” Methodology and data Quality. COPAFS The Council of Professional Associations on Federal Statistics (2004).

¹³⁹ Brown et al. (Aug. 6, 2018), at COM_DIS00009875.

¹⁴⁰ Tourangeau and Yan (2007).

interviewers.¹⁴¹ The notion that in-person enumerators will be able to address increased non-response resulting from the addition of the citizenship question is premised on the assumption that individuals who are sensitive to the question and who do not answer it on a survey instrument will nevertheless be willing to do so during an in-person interview with a government employee—an assumption that is contrary to social science research and Census Bureau predictions.

Survey methodology research also shows that interviewer characteristics also shape the willingness of individuals to respond, and to respond accurately.¹⁴² For HTC neighborhoods, the Bureau historically tries to match the language and background of the enumerator to more effectively canvas the neighborhood. In previous censuses, the Bureau prioritized hiring multilingual enumerators, including non-citizens legally authorized to work in the U.S.¹⁴³ Similar efforts may prove difficult this time, for several reasons. For example, the Census Bureau has announced it will hire only U.S. citizens as enumerators for the 2020 census¹⁴⁴, a decision that would deprive the Bureau of a pool of potential enumerators likely to have the very language skills and cultural backgrounds critical to reaching the very populations deterred from census participation because of the citizenship question.

There are already indications that the Bureau will have a difficult time hiring enumerators. According to the 2020 Operational Plan, the Bureau will recruit, train, and manage more than 420,000 temporary employees to conduct the nonresponse follow-up from mid-May to mid-August. But there are clear staffing challenges compared to 2010. In terms to hiring staff, the labor market is tighter today than in 2010, so that it could be harder to find the needed workforce. A GAO report notes that “In early hiring for 2020, Bureau officials reported smaller than expected applicant pools, declined offers, and turnover.”¹⁴⁵ The planned partnership staff totals (1630 hires) are also lower than what was used in 2010 (2719 hires). A GAO report also notes that as of July 2018 the Bureau had not yet “provided information to show it had determined the underlying factors that led to the observed overstaffing in order to help prevent a repeat in 2020”(12).¹⁴⁶ Moreover, the staffing challenges noted by a recent GAO report could make it more difficult to achieve background matches between enumerators and

¹⁴¹ Brown et al. (Aug. 6, 2018), at COM_DIS00009862.

¹⁴² Thomas, Mangione, Thomas W., Floyd J. Fowler, and Thomas A. Louis (1992), "Question characteristics and interviewer effects." *JOURNAL OF OFFICIAL STATISTICS-STOCKHOLM*- 8: 293-293.

¹⁴³ https://www.washingtonpost.com/local/social-issues/non-citizens-wont-be-hired-as-census-takers-in-2020-staff-is-told/2018/01/30/b327c8d8-05ee-11e8-94e8-e8b8600ade23_story.html?utm_term=.dc8190a92449.

¹⁴⁴ See AR 0004253; Also, Tara Bahrapour (January 30 2018) “Non-citizens won’t be hired as census-takers in 2020, staff is told,” The Washington Post. https://www.washingtonpost.com/local/social-issues/non-citizens-wont-be-hired-as-census-takers-in-2020-staff-is-told/2018/01/30/b327c8d8-05ee-11e8-94e8-e8b8600ade23_story.html?utm_term=.dc8190a92449.

¹⁴⁵ U.S. Government Accountability Office (July 2018) “Actions Needed to Address Challenge to Enumerating Hard-to-Count Groups, GAO-18-599 <https://www.gao.gov/assets/700/693450.pdf>.

¹⁴⁶ Ibid.

census neighborhoods; and the absence of records and analysis regarding the 2010 NRFU suggest that the Bureau is unprepared for this problem if it arises.¹⁴⁷

Fourth, the macro-environment can also be expected to shape an individual's willingness to respond to NRFU. The NRFU operation will be occurring during a presidential election year. Several states will be in the midst of their primary elections. This macro-environment increases the likelihood that the decennial and NRFU operation will be politicized, as happened in the 2000 decennial. It creates competition for field staff hiring and the information environment. The 2000 decennial was the last census that coincided with a presidential campaign, with exactly these consequences.¹⁴⁸ For example, then-candidate George W. Bush said that he understood "why people don't want to give over that information to the government. If I had the long form, I'm not so sure I would do it either."¹⁴⁹

Fifth, NRFU efforts will not capture those households who were not in the Census Bureau's Master Address File (MAF). Recent research concludes that one reason for an undercount of noncitizen and Hispanic households is that they live in unusual or concealed housing units that are not in the MAF.¹⁵⁰ The 2020 decennial has been designed to allow those who might not be in the MAF to self-respond through the Non-ID processing option on the Internet, but the NRFU operations work from listed addresses. Non-ID processing allows individuals to self-respond online even if they do not receive (or do not have available) their census ID that will be mailed to the Census Master Address File (MAF). Non-ID processing will match those responses to the MAF, and in the event it is missing, will attempt to geocode it to the correct census block. Data from the Bureau and external researchers finds that the Master Address File is more likely to miss non-citizens and ethnic and racial minorities who are more likely to live in complex housing situations.¹⁵¹ Because any households not in MAF must be self-motivated to respond, the previously raised confidentiality concerns suggest these households will be less likely to do so.

Sixth, the quality of administrative records used to enumerate non-responding households is worse for HTC populations. If a household is not counted after one visit, administrative records will be used to enumerate those households where the administrative records are of sufficient quality. And, for the first time, the NRFU will use administrative records to identify vacant households and to fill in the responses if the administrative records are deemed to be of adequate quality. As the Bureau has acknowledged, however, the administrative records are less likely to be of sufficient quality for non-citizen households.¹⁵² A 2017 Urban Institute

¹⁴⁷ Ibid.

¹⁴⁸ Hillygus et al. (2006).

¹⁴⁹ Hillygus et al. (2006), p. 74.

¹⁵⁰ E. Kissam (2017). Differential undercount of Mexican immigrant families in the US Census. *Statistical Journal of the IAOS*, 33(3), pp.797-816. Community-based Address Canvassing pilots have identified significant additional housing units.

¹⁵¹ See <ftp://ftp.census.gov/cac/nac/meetings/2016-11/2016-04-latino-children.pdf>.

¹⁵² R. Jarmin Dep., dated Aug. 20, 2018 at 308 : 15-17. J; David Brown, et al., *Understanding Quality of Alternative Citizenship Data Sources for the 2020 Census*, Aug. 6, 2018.

Research Report concluded that “vulnerable and hard-to-reach subpopulations may be systematically underrepresented by the new procedures. These subpopulations may not have the same body or quality of administrative records as other groups.”¹⁵³ Because of the late proposal to include a citizenship question, it remains unclear how the use of administrative records might change in light of an addition of a citizenship question.

It is widely-documented that self-responses are, generally speaking, more accurate for purposes of enumeration than the data collected through such records.¹⁵⁴ Dr. Abowd explained this in his March 1st memo to Sec. Ross¹⁵⁵:

“inclusion of a citizenship question on the 2020 Census questionnaire is very likely to reduce the self-response rate, pushing more households into Nonresponse Follow-up (NRFU). Not only will this likely lead to more incorrect enumerations, but it is also expected to increase the number of persons who cannot be linked to the administrative data because the NRFU PII is lower quality than the self-response data. In the 2010 Decennial Census, the percentage of NRFU persons who could be linked to administrative data rate was 81.6 percent, compared to 96.7 percent for mail responses. Those refusing to self-respond due to the citizenship question are particularly likely to refuse to respond in NRFU as well, resulting in a proxy response. The NRFU linkage rates were far lower for proxy responses than self-response (33.8 percent vs. 93.0 percent, respectively).”

Seventh, for nonresponding households who cannot be enumerated by administrative records, the Census Bureau will try to enumerate such households through proxy responses—which, as acknowledged by Dr. Jarmin during his deposition, are much lower quality than self-responses.¹⁵⁶ Proxy respondents can be expected to increase erroneous enumerations, whole-person imputations, and census omissions.¹⁵⁷ For example, analyses of the 2010 census found that the correct enumeration rate was 27 percentage points lower for proxies than for self-responses.¹⁵⁸ It is well-known that proxies “may not provide complete and accurate information for the census enumeration.”¹⁵⁹ Moreover, we can expect that a neighbor might be worse equipped to provide information about citizenship than about characteristics like sex and race. Internal Bureau research finds, for instance, that item nonresponse on the citizenship

¹⁵³ 2017 Urban Institute Research Report, pp. 11.

¹⁵⁴ R. Jarmin Dep., dated Aug. 20, 2018 at 308: 15-17.

¹⁵⁵ 18-CV-2921 ECF 189-1, Memorandum from J. Abowd on Preliminary analysis of alternative D (combination of B and C) (March 1, 2018), at AR-001311.

¹⁵⁶ R. Jarmin Dep., dated Aug. 20, 2018 at 308: 15-17.

¹⁵⁷ https://www2.census.gov/programs-surveys/decennial/2020/program-management/final-analysis-reports/2020-2017_04-undercount-children-analysis-coverage.pdf.

¹⁵⁸ Brown et al. (Aug. 6, 2018), at COM_DIS00009873.

¹⁵⁹ U.S. Census Bureau (2017d). Investigating the 2010 Undercount of Young Children – Analysis of Coverage Measurement Results. 2020 Census Program Memorandum series, pp. 19.

question is much higher when reporting is done by a nonrelative, compared to a relative.¹⁶⁰ As Bureau researchers acknowledge, “the imputation [of citizenship] will be challenging due to the fact that nonresponse is highly correlated with citizenship.”¹⁶¹

Last, the Census Bureau’s 2020 Census Operational Plans for Nonresponse Follow-up includes operational designs that do not account for the addition of the citizenship question. The 2020 Census operational plans—covering all operations required to execute the 2020 Census, starting with pre-census address and geographic feature updates and ending with census data product dissemination and coverage and quality measurement—have not yet been updated in light of the citizenship question addition. As noted by the GAO, the Bureau had removed three coverage measurement operations from the scope of the test, so it won’t be possible to evaluate the accuracy of the 2018 End-to-End test: “Without sufficient testing, operational problems can go undiscovered and the opportunity to improve operations will be lost, in part because the 2018 End-to-End Test is the last opportunity to demonstrate census technology and procedures across a range of geographic locations, housing types, and demographic groups.”¹⁶² Moreover, another GAO report highlights management issues in its efforts to count HTC groups—14 different operations in the decennial were designed to improve enumeration of HTC populations, but the decentralized nature of those operations creates management and integration challenges.¹⁶³

Ultimately, the Census Bureau estimates, projecting from the 2016 ACS, that including the addition of the citizenship question will increase NRFU erroneous enumerations and whole-person imputations. For all of the reasons discussed above, the addition of the citizenship question is also likely to increase omissions—individuals who should have been counted by the census but were not.

In sum, a review of the scientific literature, census documents, and deposition testimony to date reveals no evidence that the NRFU operations will adequately address the reduction in response rates among Hispanics and noncitizens, and thus prevent a resulting increase in the differential undercount among those groups. The operations in place to assure a complete, accurate, and fair census count in the face of differential self-response have been inadequately evaluated in light of the addition of a citizenship question and face significant challenges that make it hard to expect—in the absence of empirical evidence—that they will be able to mitigate the predicted differential undercount resulting in reduced self-response rates.

¹⁶⁰ Brown et al. (Aug. 6, 2018), at COM_DIS00009840.

¹⁶¹ COM_DIS00009876.

¹⁶² GAO-18-541T, 8.

¹⁶³ U.S. Government Accountability Office (July 2018) “Actions Needed to Address Challenge to Enumerating Hard-to-Count Groups, GAO-18-599 <https://www.gao.gov/assets/700/693450.pdf>.

VII. Data Quality: Utility and Integrity of Decennial Census with a Citizenship Questions

These guidelines require that all information collected and disseminated by the U.S. Census Bureau are designed to ensure and maximize the utility, objectivity, and integrity of the information. Utility or “fitness of use” refers to the “usefulness of the information for its intended users;” Objectivity means the information is “accurate, reliable, and unbiased, and is presented in an accurate, clear, complete, and unbiased manner;” Integrity refers to the security of the information—protection from unauthorized access or revision.¹⁶⁴ I conclude that the addition of the citizenship question will undermine all three of these data quality dimensions.

The previous discussion regarding census nonresponse is an indicator of the objectivity of the census data, just one component of the Bureau information quality standards. In addition, the addition of a citizenship question without adequate testing and evaluation also threatens the utility and integrity of census data, the other dimensions of information quality set forth in the information quality guidelines of the OMB and the U.S. Census Bureau Statistical Quality Standards.

The addition of the citizenship question will undermine the data quality of the decennial census. In his January 19th and March 1, 2018 Memos, Dr. Abowd admits this, noting there are “major potential quality disruptions” associated with adding a citizenship question.¹⁶⁵ But whereas my analysis thus far has focused on the accuracy and completeness (“objectivity”) of the count, the addition of a citizenship question also will potentially degrade the utility and integrity of the information. There is an inherent tension between the integrity and utility of census data that requires balancing—and that is informed by proper testing and evaluation. As privacy researchers note “a fundamental tension at the heart of every statistical agency’s mission” is the reality that reducing disclosure risk decreases the utility of the data.¹⁶⁶ Because of unanswered questions about how to protect the integrity of the data, it is currently not clear if the citizenship data collected from the citizenship question has any utility or is “fit for use” for the state purpose of DOJ enforcement of the Voting Rights Act. In other words, contrary to scientifically appropriate survey methodological practices, Secretary Ross has mandated the addition of a question to the decennial census without having first determined if the data collected can be actually used for the stated purpose.

Balancing Integrity and Utility In requiring that the disseminated information has “integrity,” the quality standards refer to the security of the information—the requirement to protect of information from unauthorized access or revision, to ensure that the information is not

¹⁶⁴ U.S. Census Bureau Statistical Quality Standards, (July 2013),

https://www.census.gov/content/dam/Census/about/about-the-bureau/policies_and_notices/quality/statistical-quality-standards/Quality_Standards.pdf, pp. i-ii.

¹⁶⁵ 18-CV-2921 ECF 189-1, Memorandum from J. Abowd on Technical Review of the Dep. of Justice Request to Add Citizenship Question to the 2020 Census (Jan. 19, 2018), at AR 001278.

¹⁶⁶ Doyle, P., Lane, J., Theeuwes, J. and Zayatz, L., 2001. Confidentiality, disclosure and data access. Amsterdam: Elsevier-North Holland, 274, pp.337-345.

compromised through corruption or falsification. Title 13 U.S. Code (9) prohibits the publication of data that can identify individuals. The Bureau often references this legal protection as a reassurance of confidentiality, implying that any perceptions of disclosure risk are misplaced or could be corrected through outreach.

Fundamentally, the addition of a citizenship question increases the disclosure risk of the decennial census. Data breaches happen; systems fail (especially when not adequately tested); and policies can be changed. Disclosure risk depends not only on the disclosure potential but also on the potential harm associated with the collected information.¹⁶⁷ The addition of a citizenship question thus increases the disclosure risk because there is greater potential harm associated with the disclosure of citizenship status compared to the disclosure of other demographic characteristics collected in the decennial. For non-citizen households, disclosure of citizenship status could result in deportation, job loss, fines, and/or imprisonment. The Bureau conducted and released a Privacy Impact Assessment for the decennial census in June 2018, but it did not reflect the addition of a citizenship question.¹⁶⁸

Beyond unintended data breaches, the addition of a citizenship question in fact increases the disclosure risks associated with published products from the decennial. Privacy research—including by Census Bureau researchers—has identified the potential database reconstruction based on the release of aggregate data statistics to be a significant disclosure risk.¹⁶⁹ Dr. Abowd admits that “Experiments have led to the declaration that reconstruction of Title 13-sensitive data is an issue, no longer a risk”¹⁷⁰ He concludes that “It may no longer be reasonable to assert that a product is empirically safe given best-practice disclosure limitation prior to its release”¹⁷¹

In order to prevent the possibility of tracing statistics back to a specific respondent, the Bureau goes through a process of “noise injection” to “alter the underlying statistical tabulations before publication.”¹⁷² In response to weaknesses in previous noise injection methods, the Bureau has been developing a system called differential privacy that offers more robust

¹⁶⁷ Chris Skinner (2012), “Statistical disclosure risk: Separating potential and harm.” *International Statistical Review* 80.3 (2012): 349-368.

¹⁶⁸ http://www.osec.doc.gov/opog/privacy/Census%20PIAs/CEN08_PIA_SAOP_Approved.pdf

¹⁶⁹ For example, I. Dinur. and K Nissim (2003), Revealing information while preserving privacy. *In Proceedings of the twenty-second ACM SIGMOD-SIGACT-SIGART symposium on Principles of database systems*, pp. 202-210. ACM.

¹⁷⁰ John Abowd (July 30, 2018) Staring-Down the Database Reconstruction Theorem. Presentation at Joint Statistical Meetings, Vancouver BC, Canada, <https://www.census.gov/content/dam/Census/newsroom/press-kits/2018/jsm/jsm-presentation-database-reconstruction.pdf>.

¹⁷¹ John Abowd (June 5, 2017) “Research Data Centers, Reproducible Science, and Confidentiality Protection: The Role of the 21st Century,” Statistical Agency Presentation to Summer DemSem, Sponsored by the Wisconsin Federal Statistical RDC.

¹⁷² Census blog post, Sept 4, 2018. https://www.census.gov/newsroom/blogs/research-matters/2018/08/protecting_the_conf0.html.

protections. Unfortunately, the processes and procedures were developed for a decennial census without a citizenship question (and were set to be implemented in full with the 2018 End-to-End Test).

Despite assurances that the Bureau would be more transparent about the procedures, Dr. Abowd acknowledges that decisions have not yet been made as to how the data can or will be used and released given the potential disclosure risks.¹⁷³ In fact, he cannot even say if the error margins around the block-level citizen voting-age population estimates will actually improve over the estimates that are currently available based on the ACS because the Bureau hasn't "set the parameters of the disclosure avoidance system."¹⁷⁴

Dr. Abowd explains that "this process is a delicate balancing act. Enough noise must be added to protect confidentiality, but too much noise could damage the statistic's fitness-for-use."¹⁷⁵ Without a clear understanding of how a citizenship question will be used to produce the requested information, it is impossible to evaluate both the utility and integrity of the data—critical components of the Census Bureau Quality Standards.

Beyond the reduced utility that comes from noise injections needed to reduce the disclosure risk, the addition of a citizenship question is also less timely than ACS data, which provide numbers every 5 years. In recommending against the addition of the citizenship question, the Bureau emphasized that "Not only is using administrative records potentially a more accurate measure of citizenship, it is also cost efficient. The Bureau already acquires SSA Numident information on a quarterly basis. To collect that information through self-report by adding a question to the decennial would require additional unnecessary costs and burden to the Bureau"¹⁷⁶

In sum, the addition of a citizenship question threatens the utility and integrity of the decennial count. The decision to burden the populace with a sensitive survey question of unclear utility, especially given the potential disclosure risks, violates basic survey data quality processes.

Looking Beyond the Decennial

In sum, high quality census numbers are essential for the economic and political health of the nation. Based on a review of the quantitative and qualitative research and evidence, the preponderance of the evidence suggests that it is highly likely that the addition of a citizenship question will exacerbate the disproportionate undercount of non-citizen households and Hispanics.

¹⁷³ J. Abowd Dep., dated Aug. 29, 2018, at 101.

¹⁷⁴ J. Abowd Dep., dated Aug. 29, 2018, at 101.

¹⁷⁵ Census blog post, Sept 4, 2018. https://www.census.gov/newsroom/blogs/research-matters/2018/08/protecting_the_conf0.html.

¹⁷⁶ Berning et al. Memo (Dec 22, 2017), AR 0005500.

Finally, the implications for data quality go beyond the decennial count. To the extent the addition of the citizenship question reduces the objectivity and integrity of the decennial count, it is also risks reducing overall trust in government statistics and thus participation in the surveys and censuses that collect those statistics. The Bureau has long recognized that trust is essential for individuals to be willing participants in government surveys. As such, the issues raised here have implications not only for the quality of the decennial count, but also for the quality of other government surveys.

I reserve the right to amend or supplement my opinions if additional information or materials become available.

I declare under penalty of perjury under the laws of the United States that the forgoing is true and correct to the best of my knowledge.

DATED this 7th Day of September, 2018

A handwritten signature in black ink, appearing to read "D. Sunshine Hillygus", written over a horizontal line.

D. Sunshine Hillygus, PhD

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